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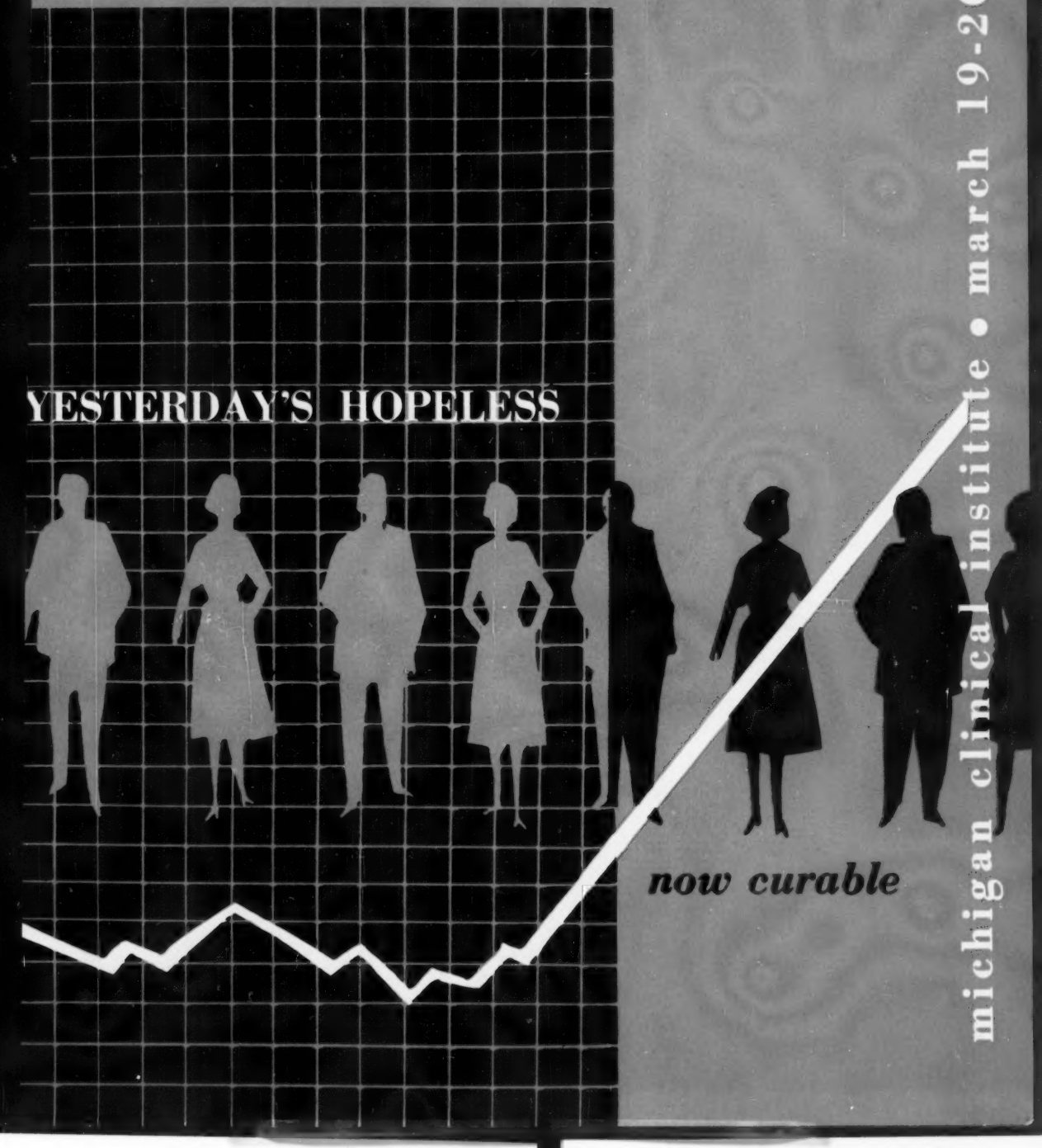

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(1) Petersdorf, R. G.; Bennett, I. L., Jr., & Rose, M. C.: *Bull. Johns Hopkins Hosp.* 100:1, 1957. (2) Yow, E. M.: *GP* 15:102, 1957. (3) Altemeier, W. A., in Welch, H., and Marti-Ibanez, F., ed.: Antibiotics Annual 1956-1957, New York, Medical Encyclopedia, Inc., 1957, p. 629. (4) Kempe, C. H.: *California Med.* 84:242, 1956. (5) Spink, W. W.: *Ann. New York Acad. Sc.* 65:175, 1956. (6) Rantz, L. A., & Rantz, H. H.: *Arch. Int. Med.* 97:694, 1956. (7) Wise, R. I.; Cranny, C., & Spink, W. W.: *Am. J. Med.* 20:176, 1956. (8) Smith, R. T.; Platou, E. S., & Good, R. A.: *Pediatrics* 17:549, 1956. (9) Royer, A.: Scientific Exhibit, 89th Ann. Conv. Canad. M. A., Quebec City, Quebec, June 11-15, 1956. (10) Bennett, I. L., Jr.: *West Virginia M. J.* 53:55, 1957. (11) Altemeier, W. A.: *Postgrad. Med.* 20:319, 1956. (12) Felix, N. S.: *Pediat. Clin. North America* 3:317, 1956. (13) Metzger, W. I., & Jenkins, C. J., Jr.: *Pediatrics* 18:929, 1956. (14) Woolington, S. S.; Adler, S. J., & Bower, A. G., in Welch, H., and Marti-Ibanez, F., ed.: Antibiotics Annual 1956-1957, New York, Medical Encyclopedia, Inc., 1957, p. 365. (15) Waisbren, B. A., & Strelitzer, C. L.: *Arch. Int. Med.* 99:744, 1957.

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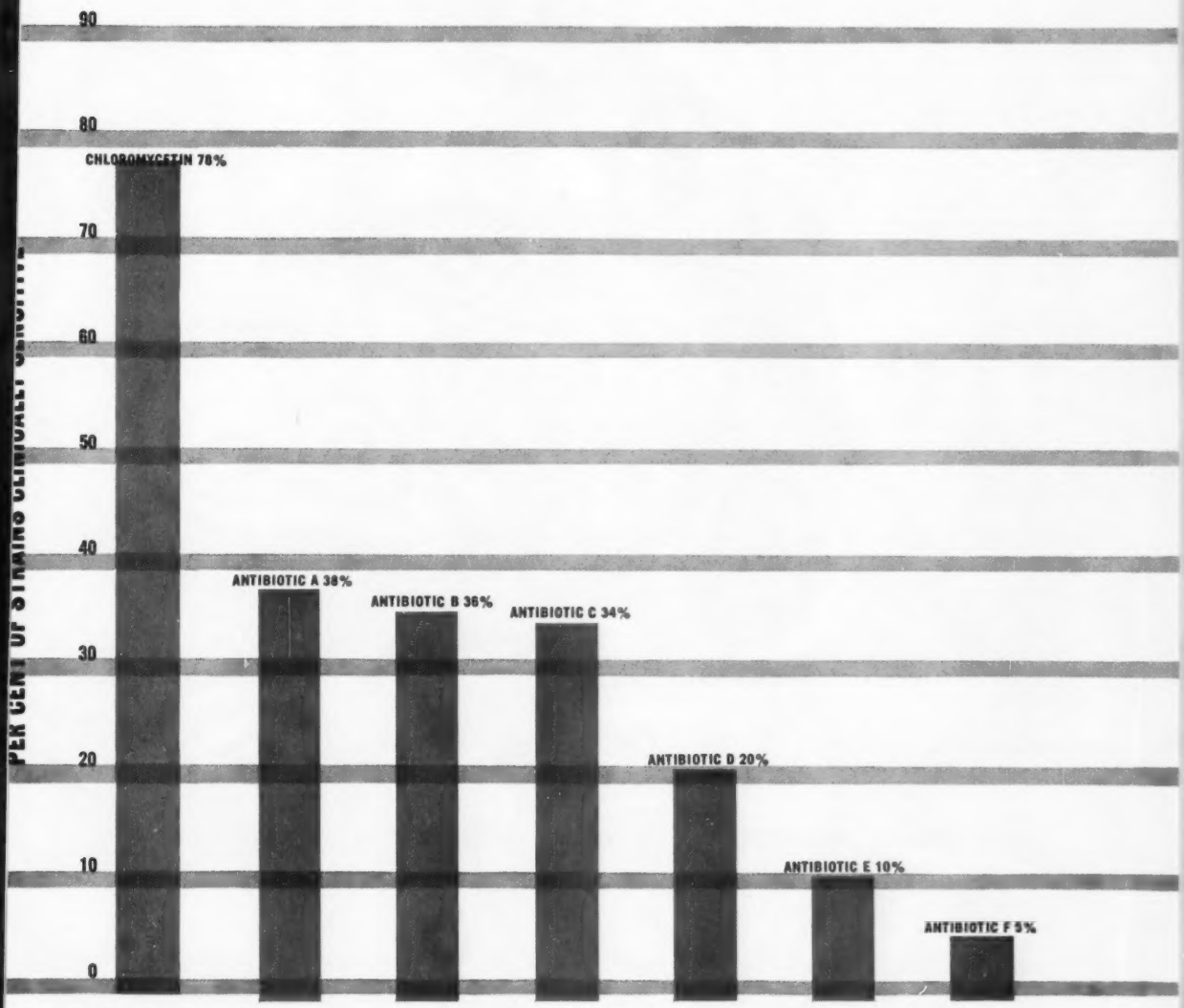

*This graph is adapted from Waisbren and Strelitzer.[15] It represents *in vitro* data obtained with clinical material isolated between the years 1951 and 1956. Inhibitory concentrations, ranging from 3 to 25 mcg. per ml., were selected on the basis of usual clinical sensitivity.

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1. Fromer, J. L., and DeRisio, V. J.: *Lahey Clin. Bull.* 10:45, Oct.-Dec., 1956.

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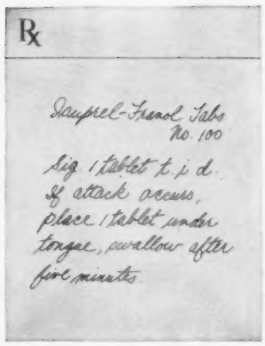

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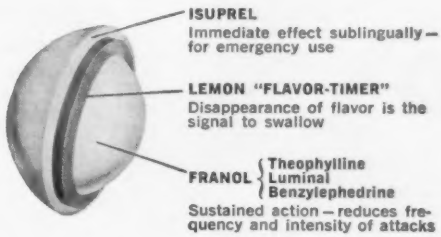
"Flavor-timer" signals patients when to swallow tablets



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Standing Orders for Nurses in a Mass Disaster

To facilitate prompt and efficient treatment of cases in a Mass Disaster, where the nurse may be called upon to act independently of physicians, the following points are important:

1. Nursing practices should be standardized over wide areas.
2. Nursing practices should be mutually understood by both the medical and the nursing professions.
3. The psychological aspects should be kept in mind at all times.

I. PRIORITIES FOR IMMEDIATE TREATMENT AND PROMPT EVACUATION TO NEXT TREATMENT CENTER (EXCEPT FOR OBVIOUSLY MORIBUND PATIENTS) ARE AS FOLLOWS:
- A. Massive hemorrhage
- B. Asphyxia
- C. Chest Wounds
- D. Shock
- E. Abdominal Wounds
- F. Burns and Crush Injuries
- G. Head and Spine Injuries

NOTE: Emotionally disturbed patients may have to be segregated.

II. IDENTIFICATION
Make certain each patient has an emergency medical tag. Fill in all required data.

III. RELIEF OF PAIN: NARCOTICS
A. Dosage for adults:

Drug	*Dosage*
Morphine	gr 1/6 to gr ¼
Codeine	gr ¼ to gr ½
Demerol	mg 50 to mg 100
Dilaudid	gr 1/32 to gr 1/20
Pantopon	gr 1/6 to gr 1/3

NOTE: For aged and/or small individuals smaller doses must be used.

B. Dosage for children: Young's Rule

$$\frac{\text{Age of child}}{\text{Age} + 12} = \text{proper fraction of adult dose.}$$

Example: 8-year-old child

$$\frac{8}{8+12} = \frac{8}{20} = \frac{2}{5} \text{ of adult dose}$$

C. Narcotics are for *relief of pain only*. Not to be used for restlessness, apprehension, agitation hysteria.

IV. HEMORRHAGE
- A. Pressure dressing—maintain pressure
- B. Elevate part
- C. Tourniquet should be applied *only* for life-endangering hemorrhage that cannot be controlled by any other means. Once applied, a tourniquet should *not* be released regardless of the time interval elapsed except by a physician who is prepared to control the hemorrhage and to replace blood volume adequately. A notation "T" should *always* be made on the emergency medical tag giving tourniquet location and time of application.

V. TRAUMATIC SHOCK
- A. Position: Horizontal—prone or supine; elevate feet if blood pressure is below 100 systolic.
- B. Warmth: Use blankets to keep patient comfortably warm.
- C. Vital signs: Frequent check of pulse, blood pressure and respiration.
- D. Administration of fluids:
  1. Intravenous fluids: Glucose, saline or plasma expanders. Blood to be given only on order of a physician.
  2. Emergency oral fluid: Two to three quarts per day consisting of the following solution:
     1 teaspoon of salt and ½ teaspoon of sodium bicarbonate to each quart of water

  If the above is not tolerated or not available any available fluid should be used.
- E. Check for anuria or presence of hematuria.
- F. Pain: Do not repeat morphine while patient is still in shock.

VI. FOREIGN BODIES
Leave alone—except if blocking airway

VII. TREATMENT OF INJURIES
- A. Lacerations, avulsions and massive wounds:
  1. Control hemorrhage (pressure as a rule).
  2. Splint deep wounds and crush injuries.
  3. Relieve pain. Record drug, dose, and time.
  4. Soap and water cleansing of wound whenever and wherever possible.
  5. Simple sterile dressing.
  6. Antibiotics stat intramuscularly or orally. Continue for three days. Ask patient about sensitivity first.
  7. Tetanus prophylaxis: for persons previously immunized with toxoid, give one dose of Tetanus Toxoid. Tetanus antitoxin is to be given only on the order and direction of a physician.
- B. Burns:
  1. Immediate treatment:
     (a) Slit constricting clothing. Do not remove unnecessarily as this may be the patient's only protection. Examine for shock and other injuries. Render necessary first aid.
     (b) Relieve pain. Record drug, dose, and time.
     (c) Simple clean dressing to burned areas.
  2. Early definitive treatment:
     (a) Estimate extent of burn—Rule of 9's.

Head	9%
Upper extremities	9% each
Anterior trunk	18%
Posterior trunk	18%
Lower extremities	18% each

     (b) Give fluids and electrolytes as indicated.

(Continued on Page 1510)

From the Medical and Public Health Division of Civil Defense.

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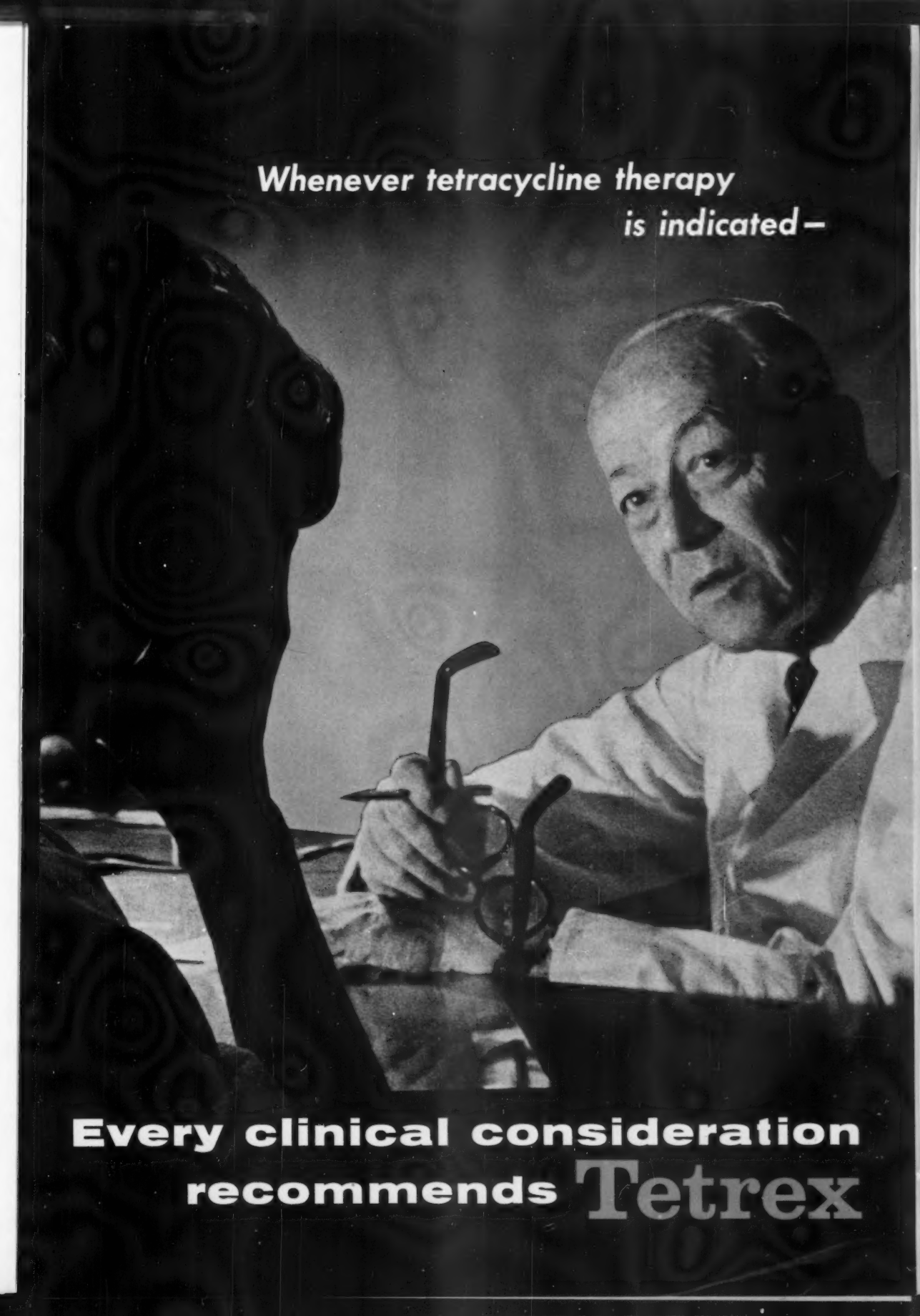
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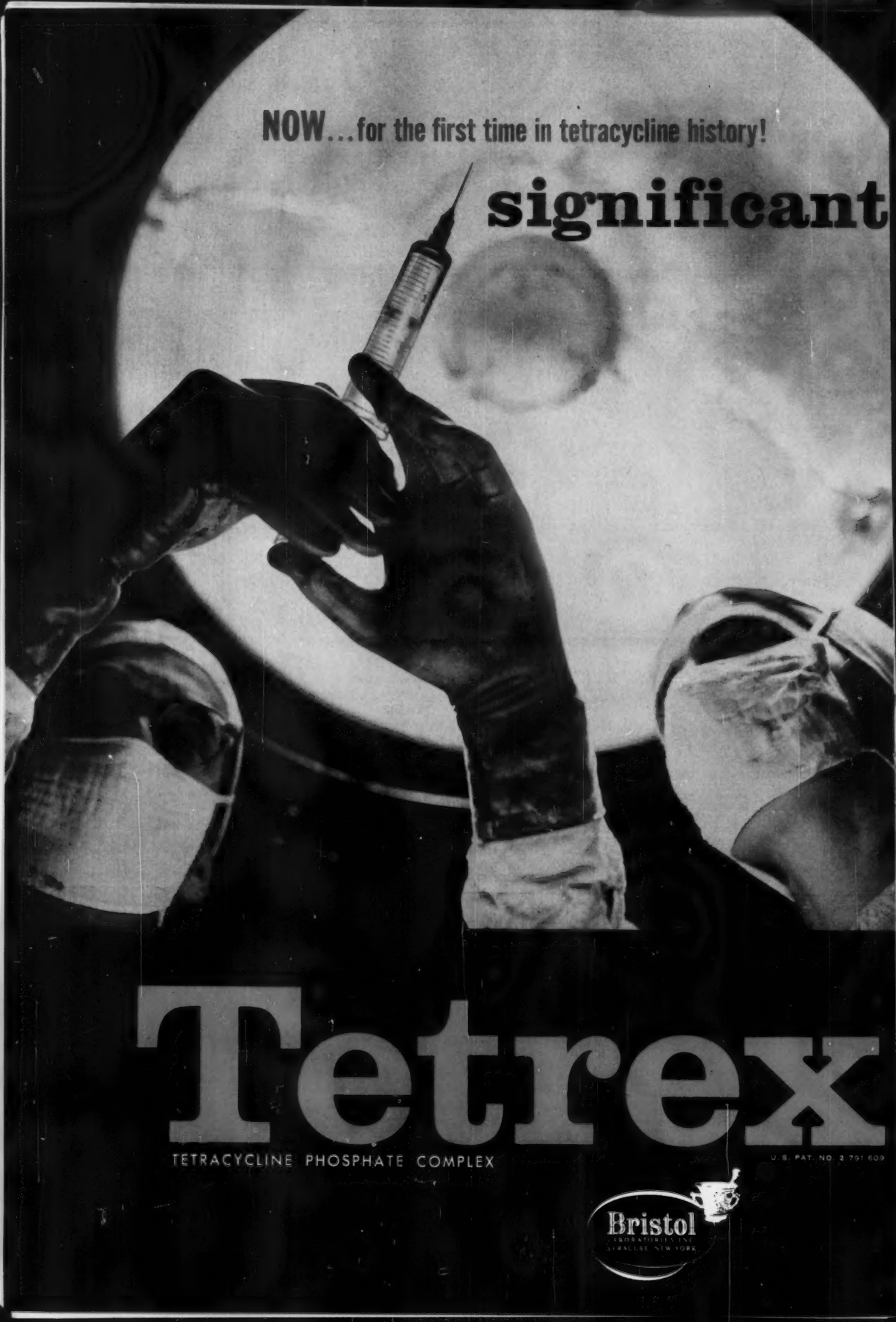
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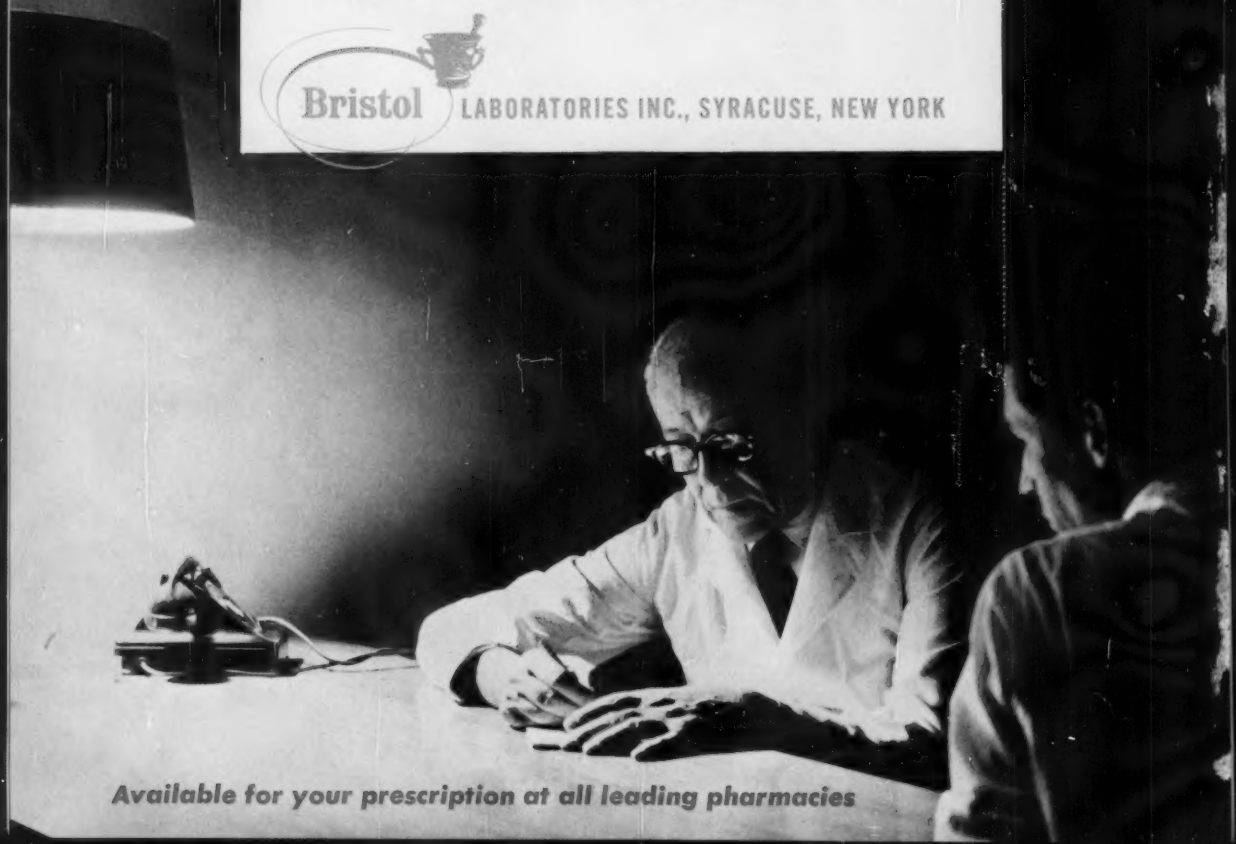

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(Continued from Page 1508)

(1) Total fluids required during first day: (Oral and/or intravenous) Percentage of body area burned × Weight of patient (in pounds) + Patient's normal daily fluid requirement (2000 cc for 150 lb. man . . . scale up or down according to wt.)

Example: Fluid requirements of 150 lb. man with 30% of body surface burned.

30 × 150 + 2000 = 6500 cc. Give in divided doses; ½ in first 8 hours; ½ over next 16 hours.

(2) Fluid requirements during second 24 hours are ½ of first day's.

(3) Oral salt and soda solution to be used to the greatest extent possible:

1-2-4 Formula

Water .....1 gallon
Baking soda .....2 teaspoonfuls
Salt .....4 teaspoonfuls

(c) Treatment based on extent of burn:
- (1) 15% or less. Oral fluids only. Dress burns, advise and discharge to self care if ambulatory.
- (2) 15% to 40%. Treat intensively. Oral fluids preferred. Use blood, plasma, and IV fluids only if vomiting or other complications require it.
- (3) Over 40%. Defer intensive definitive treatment until 15% to 40% group is cared for. Give sedatives, analgesics and narcotics as required.

(d) Fluid requirements with extensive burns—short method of computing:
- (1) Adults: Total fluids required in first 24 hours=10% of body wt.—5% in second 24 hours.
- (2) Children: Total fluids required in first 24 hours = 12% of body wt. — 6% in second 24 hours.

(1 Quart or 1 Liter weighs 2½ pounds—Approx.)

(e) Treatment of Burned Area
- (1) No debridement; no sprays; no tannic acid; no ointments.
- (2) No blisters opened.
- (3) Apply the standard civil defense burn dressing. If burn dressing is not available, use sterile gauze next to burn, add fluff gauze and hold in a position with roller bandage or ACE type bandage as a pressure dressing. Avoid constriction.

(f) Analgesics or narctoics as indicated for pain.

(g) Antibiotics stat and for next three days.

C. Crushing injury with shock:
1. Arrest hemorrhage if present
2. Immobilize fractures immediately
3. Treat shock as outlined under Section V

D. Sucking wounds of chest
1. Immediate occlusive dressing
2. Relieve pain. Record drug, dose, and time.
3. High priority for evacuation

E. Abdominal wounds
1. Relieve pain. Record drug, dose, and time.
2. NOTHING BY MOUTH
3. Simple massive dressings:
   a. Do not replace viscera
   b. Do not remove foreign bodies
   c. Do not explore wounds
   d. Warm moist saline dressing over exposed viscera if possible

F. Brain and spinal cord injuries
1. NO MORPHINE. For extreme restlessness may give barbiturate.
2. Maintain airway
3. Position:
   (a) Flat on back and immobilization for cord injury
   (b) Belly down with face to one side for brain injury

G. Fractures
1. Closed Fractures
   (a) Skull
      (1) When in doubt, treat as brain injury
      (2) No narcotics
   (b) Upper extremity
      (1) Shoulder, arm and elbow: apply a sling with the elbow at a right angle and then bind the extremity to the body with a circular bandage
      (2) Forearm, wrist and hand: immobilize with a basswood or newspaper splint and place in a sling with the elbow at a right angle.
   (c) Lower extremity
      (1) Hip-femur:
         (a) Thomas splint if available
         (b) Splint from arm-pit to ankle with board; or
         (c) Tie legs together
         (d) Relieve pain. Record drug, dose, and time
      (2) Lower leg:
         (a) Splint fracture from hip to ankle
         (b) Simple splint for ankle and foot fractures
         (c) Relieve pain. Record drug, dose, and time.
   (d) Spine
      (1) Cervical—face up on litter; immobilize head
      (2) Dorsal, lumbar:
         (a) Belly down, head to one side, or flat on back with pillows under small of back
         (b) Never flex patient or allow sitting position
         (c) Flat rigid surface
         (d) Relieve pain. Record drug, dose, and time.
   (e) Compound fractures:
      Same treatment as for closed fracture plus
      (1) Dry sterile dressing
      (2) Penicillin 300,000 units stat and repeat daily for three doses (Check history of sensitivity)
      (3) Relieve pain. Record drug, dose, and time

(Continued on Page 1519)

The many thousands of patients successfully treated with Signemycin* over the past year have confirmed the value of this safe and effective antibiotic agent. One further therapeutic resource is thereby provided the practicing physician who is faced daily in office and home practice with immediate diagnosis of common infections and the immediate institution of the most broadly effective therapy at his command, in his continuing task of the ever-extending control over human pathogens.

SIGNE

Now buffered to produce higher, faster blood levels; specify the V form on your prescriptions.

Supply: SIGNEMYCIN V Capsules, 250 mg. Signemycin Capsules, 250 mg. and 100 mg. Signemycin for Oral Suspension, 1.5 Gm., 125 mg. per 5 cc. teaspoonful, mint flavor. Signemycin Intravenous, 500 mg. vials and 250 mg. vials, buffered with ascorbic acid.

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"Eighty-seven patients with various infections of the skin were treated over a period of six weeks with [Signemycin]. Excellent or good results were achieved in sixty-seven, including eleven of twenty-two patients refractory to other antibiotics."

Lewis, H. H.: Frumess, G. M., and Henschel, E. J.: Rocky Mountain M. J. *54*:806 (Aug.) 1957.

"Results of treatment with oleandomycin-tetracycline of 50 infections [mostly respiratory] due to resistant organisms and 40 infections [respiratory, skin, urinary infections] due to sensitive organisms are very encouraging. In some of these patients, [Signemycin] was lifesaving, and in others surgery was made unnecessary. This confirms other reports."

Shubin, H.: Antibiotic Med. & Clin. Therapy *4*:174 (March) 1957.

Based on case reports documented by independent investigators in 26 countries abroad, the clinical response obtained with Signemycin in 1404 patients with a wide variety of infections was successful in 1329 patients; in 13 cases only was it necessary to discontinue therapy because of side effects.

Report on 1404 Cases Treated with Signemycin: Medical Department, Pfizer International. Available on request.

In 50 nonselected patients, Signemycin "...appears to be effective in the treatment of most general surgical infections, including virulent staphylococcus aureus infections. In some cases these infections had been clinically resistant to other antibiotics. The drug is apparently well tolerated."

Levi, W. M., and Kredel, F. E.: J. South Carolina M. A. *53*:178 (May) 1957.

Of 50 patients with various infectious processes, 26 had not responded to previous antibiotic therapy. With Signemycin "Ninety-six per cent of the mixed infections were clinically controlled. . . . and in none of the cases was there any reason to discontinue the drug."

Winton, S. S., and Chesrow, E.: Antibiotics Annual 1956-1957, New York, Medical Encyclopedia, Inc., 1957, p. 55.

Signemycin in 79 patients with severe soft tissue infections: "The average response of these cases was excellent and inflammatory symptoms subsided with almost uniform rapidity....The magnitude and incidence of surgical intervention was reduced....Side reactions were minimal. . . ."

LaCaille, R. A., and Prigot, A.: Antibiotics Annual 1956-1957, New York, Medical Encyclopedia, Inc., 1957, p. 67.

Five groups of patients (total 211) with acne were treated with one of five antibiotic agents, including Signemycin (55 cases). "The results were evaluated taking into consideration the usual response to such conservative conventional therapy and the rapidity of response." In 8 weeks, Signemycin rapidly attained and maintained the highest percentage of efficacy of antibiotic agents tried.

Frank, L., and Stritzler, C.: Antibiotic Med. & Clin. Therapy *4*:419 (July) 1957.

In the treatment of 78 patients with tropical infections, some complicated by multiple bacterial contamination or present for years, Signemycin was found to be "...an exceptionally effective agent," requiring smaller doses and less extended periods of therapy than with the tetracyclines alone, and "caused no notable toxic reactions."

Loughlin, E. H., and Mullin, W. G.: Antibiotics Annual 1956-1957, New York, Medical Encyclopedia, Inc., 1957, p. 63.

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In pain. Anxious. Fearful. On the road to cardiac invalidism. These are the pathways of angina patients. For fear and pain are inextricably linked in the angina syndrome.

For angina patients—perhaps the next one who enters your office—won't you consider new CARTRAX? This doubly effective therapy combines PETN (pentaerythritol tetranitrate) for lasting vasodilation and ATARAX for peace of mind. Thus CARTRAX relieves not only the anginal pain but reduces the concomitant anxiety.

Dosage and supplied: begin with 1 to 2 yellow tablets (10 mg. PETN plus 10 mg. ATARAX) 3 to 4 times daily. This may be increased for maximal effect by switching to *pink* tablets (20 mg. PETN plus 10 mg. ATARAX). In bottles of 100.

CARTRAX should be taken *before* meals, on a *continuous* dosage schedule. Use with caution in glaucoma.

1. Russek, H. I.: J. Am. Geriat. Soc. *4*:877 (Sept.) 1956.

*Trademark

Roerig

New York 17, New York

Suggested Schedule for the Treatment of Syphilis, Chancroid, Lymphogranuloma Venereum, Granuloma Inguinale, and Gonorrhea

There is no evidence that a total dosage of more than 4,800,000 units of penicillin for any type of syphilis is necessary. Repeated courses of penicillin do not accelerate the fall in serological titre. In early syphilis, the height of the serologic titre dictates the speed of serologic fall. Low titres become negative quicker than high titres. In late asymptomatic and symptomatic syphilis, the serologic titre may fall slowly but may never become negative. This continued reactivity does not mean the patient needs more treatment. The following suggested treatment schedules do call for somewhat larger total dosage than mentioned previously, but are considered acceptable.

Primary and Secondary Syphilis.—A total dosage of 6 million units of procaine penicillin should be administered, or 4,800,000 units of Bicillin. When daily treatment can be administered, give ten daily doses of 600,000 units (2cc.) of procaine penicillin in either aqueous or oils suspension (P.A.M. may also be used). When more convenient to give treatment twice weekly, use procaine penicillin in oil with aluminum monosterate (P.A.M.) giving 2,400,000 units (8cc.) for the first injection followed by three more injections at three to four-day intervals of 1,200,000 units (4cc.). If benzathine penicillin G (Bicillin or Permapen) is available and weekly injections are more convenient, given 2,400,000 units and repeat this dosage at one week.

Persons Allergic to Penicillin.—Oxytetracycline hydrochloride (Terramycin Hydrochloride) chlortetracycline hydrochloride (Aureomycin Hydrochloride), chloramphenicol (Chloromycetin), erythromycin (Erythrocin, Ilotycin) are considered to be effective anti-syphilitic agents. The first two are more commonly used. Minimal effective doses of antibiotics other than penicillin have not been determined. Schedules most commonly used call for a total dosage of 40 to 60 grams (also influenced by the amount of penicillin the patient may have already received) usually given at the rate of ¼ to ½ gram Q.I.D. according to tolerance.

Latent Syphilis.—600,000 units of procaine penicillin given daily for ten days as for primary and secondary syphilis, total dosage 6 million units; or 1,200,000 units P.A.M. given twice weekly for six injections, totaling 7,200,000 units; or benzathine penicillin G 2,400,000 units given weekly for two or three injections.

Late Symptomatic Syphilis.—Same as for latent syphilis except where neurosyphilis is present would recommend 15 daily doses of 600,000 units of procaine penicillin (9 million units); or 1,200,000 units P.A.M. given twice weekly for four weeks, totaling 9,600,000 units.

Syphilis in Pregnancy.—Therapy same as for primary or secondary syphilis. It is recommended that if labor is imminent that 2,400,000 units of penicillin be given as the first injection and follow-up treatment be continued according to the schedule selected if the patient has not been delivered. Whenever possible a quantitative serologic test should be obtained in *each trimester* of *pregnancy*. There is always a question as to whether a woman who has acquired syphilis should be treated during each pregnancy. In general, if she has been previously adequately treated and there is no evidence of a relapse or reinfection, additional therapy is unnecessary. However, if there is a question of adequacy of previous treatment, her remaining under close observation, or any evidence of relapse or reinfection, she should, of course, be retreated.

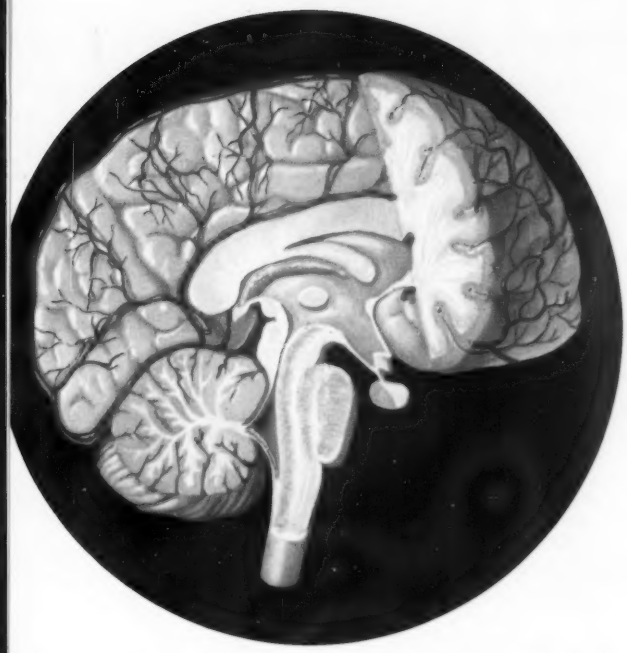
Congenital Syphilis. — Ordinarily congenital syphilis should be treated in the same way as acquired syphilis. The dosage should be assigned according to weight, but slightly over rather than under the proportionate adult dose. Infantile congenital syphilis (under two years of age) should be treated as for primary—secondary syphilis. Late congenital syphilis as for latent, or late syphilis.

Gonorrhea.—1,200,000 units of penicillin should be administered in a single dose in uncomplicated acute or chronic gonorrhea in both men and women. In cases of epididymitis in males, or salpingitis or suspected salpingitis in the females, three doses of 1,200,000 units of penicillin (4cc.) of P.A.M. should be administered on alternate days. If allergic to penicillin, it is recommended that uncomplicated gonorrhea in males receive ½ gram Tetracycline, and repeat in six hours. In gonorrhea epididymitis and gonorrhea in females, give ¼ gram Tetracyclines q6h for twelve doses (3 grams). If Tetracyclines are not available, give sulfonamides (Triple sulfa or Gantrisan) 1 gram Q.I.D. for five days and repeat if indicated.

Chancroid.—Sulfonamides (Triple Sufonamides (Triple Sulfa or Gantrisan) 1 gram Q.I.D. for seven days. Tetracyclines, Chloramphenicol, or

(Continued on Page 1606)

EDITOR'S NOTE: This is a subcommittee report by L. W. Shaffer, M.D., J. A. Cowan, M.D., and A. C. Curtis, M.D., approved for publication by the Venereal Disease Committee, and The Council MSMS.



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- no blood dyscrasias, liver toxicity, Parkinson-like syndrome or nasal stuffiness

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Usual dosage: One or two 400 mg. tablets t.i.d.

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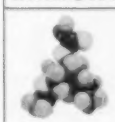	DISCOVERED & INTRODUCED BY
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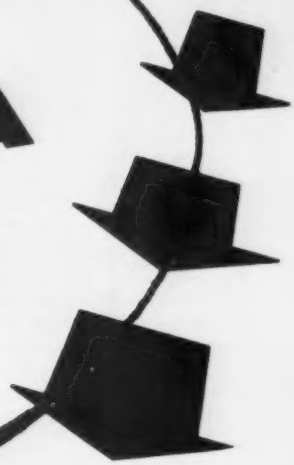

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Gerontology Conference

A Conference for Physicians and all other persons interested in the over-all care of older people will be held in Ann Arbor, Michigan, January 13, 14 and 15, 1958. It is being co-sponsored by the Michigan State Medical Society, the Michigan Society of Gerontology and the Department of Post-Graduate Medicine of the University of Michigan Medical School.

The program which follows stresses the importance of all aspects of the care of older persons, and therefore should be of interest to physicians, sociologists, legislators and all related personnel working with the aging. The speakers and the audience will actively participate in a discussion of many interrelated subjects at all of the sessions.

MONDAY, JANUARY 13

9:00 REGISTRATION—Rackham Building Lobby

Morning—First Session

Rackham Building Assembly Hall

A Co-ordinated Team Approach to the Problems of Our Aging Population

Presiding: A. Hazen Price, M.D., Detroit, Michigan

9:30 Greetings—Michigan State Medical Society and Michigan Society of Gerontology
9:45 Purpose of Conference—Meaning of Overall Care
10:00 "Family and Individual's Responsibility"
Katherine Reebel, University of Michigan
10:15 "Community Obligations"
Mrs. Margaret Guinfy, Detroit, Michigan
10:30 "Medicine's Responsibility"
Charles W. Sellers, M.D., Detroit, Michigan
10:45 "State and Federal Responsibility"
Barrett Lyons, Lansing, Michigan
11:00 **Panel Discussion**
With audience participation
12:00 **Luncheon**
Michigan League—Michigan Society of Gerontology Business Meeting

Afternoon—Second Session

Amphitheater of University Hospital

Medical, Family and Community Responsibility in the Care of Older Cardiac and Diabetic Patients With All the Psychologic and Economic Implications

Presiding: Jack Rom, M.D., Detroit, Michigan

2:00 "Heart Disease Later in Life"
Presentation of Cases
Discussion by Paul Barker, M.D., Ann Arbor, Michigan
"Diabetes in the Elderly Patient"
Presentation of Cases
Discussion by Laurence F. Segar, M.D., Detroit, Michigan
Panel Discussion—Internists, Psychiatrist, Dietitian and Social Case Worker, with audience participation.

Evening—Community Night

At Michigan League

Presiding: A. C. Furstenberg, M.D., Dean, University of Michigan Medical School
Reports on Community Projects for the Aging Throughout the State—Detroit, Lansing, Flint, Muskegon
Address—"The Healing Power of the Mind and Body"
Russell L. Dicks, D.D., Duke University Divinity School

TUESDAY, JANUARY 14

Morning—Third Session

Rackham Amphitheater

Problems of Long-Term Illness

Presiding: Professor Wilbur Cohen, Ann Arbor, Michigan

9:00 "Chronic Disease Detection"
Vlado A. Getting, M.D., Ann Arbor, Michigan
9:15 "Community Education Programs"
Anthony Lenzer, Ann Arbor, Michigan
9:30 "Hospital and Home-Care Programs"
Sidney A. Chapin, M.D., Dearborn, Michigan
Coffee Break
10:15 "Nursing Homes and New Standards"
A. E. Heustis, M.D., Commissioner, Department of Health, Lansing, Michigan
10:30 "What Can Be Done for the Mentally Frail and Mentally Ill?"
Moses Frohlich, M.D., Ann Arbor, Michigan
11:00 **Panel Discussion**
With audience participation

Afternoon—Fourth Session

Amphitheater of University Hospital

Rehabilitation of Patients with Long-Term Illness, Medical, Family and Community Responsibility With All the Psychologic and Economic Implications

Presiding: Fred C. Swartz, M.D., Lansing, Michigan

2:00 "Hemiplegia (stroke)"—Presentation of Cases
Discussion—Fred Swartz, M.D., Lansing, Michigan

Arthritis in the Older Patient—Presentation of Cases
Discussion—W. D. Robinson, M.D., Ann Arbor, Michigan

Panel Discussion — Internists, Physiatrist, Psychiatrist, sociologist, visiting nurse, and nursing home operator with audience participation.

Tuesday Evening—Banquet

Presiding: Gordon Aldridge, East Lansing, Michigan

Reports on Organizational and State Planning for the Aging

Address—"The Role of Members of the Gerontological Society in Promoting the Welfare of Older People"

WILMA DONAHUE, Ph.D., Ann Arbor, Michigan
President, Michigan Society of Gerontology

Adjournment—Annual Conference Michigan Society of Gerontology

WEDNESDAY, JANUARY 15

Morning Session

Amphitheater of University Hospital

Clinical Problems of the Elderly Patient

Presiding: H. W. WOUGHTER, M.D., Flint, Michigan

10:00 Presentation of Cases
STAFF MEMBERS OF UNIVERSITY HOSPITAL
"Fractures"
"Peripheral Vascular Disease"
"Prostatic Obstruction"
"Procidentia"
"Medical Evaluation Pre-operatively"
"Types of Anesthesia"

Information:

Registration—Registration fee for the conference is $2.00.

Rooms—A block of rooms has been reserved at the Michigan Union. Write directly to the Michigan Union, Ann Arbor, Michigan, for your room reservation stating that you are attending the Gerontology Conference and giving dates of arrival and departure.

Advance Registration—Special permits for restricted campus parking lots will be mailed to those registering in advance.

STANDING ORDERS FOR NURSES IN A MASS DISASTER

(Continued from Page 1510)

(4) Tetanus prophylaxis. For persons previously immunized with toxoid give one dose of tetanus toxoid. Tetanus antitoxin to be given only on the order and direction of a physician

VIII. RESPIRATORY OBSTRUCTION (Asphyxia)

A. Respiratory obstruction, from whatever cause, requires immediate treatment.
B. Remove foreign bodies from airways (false teeth, vomitus, etc.)
C. Keep airways open:
   1. Turn head to side.
   2. If unconscious, lift up the lower jaw.
   3. If necessary, pull tongue forward. Hold out with safety pin through tongue.
D. If breathing has stopped, as from drowning, electric shock, exposure to smoke or gases, start *artificial respiration*. Keep up artificial respirations as long as there are signs of life or until patient resumes spontaneous breath-breathing.
E. Keep a close watch on all post anesthesia patients to prevent respiratory obstruction by mucous, vomitus, tongue swallowing, etc. Position unconscious patients on side. Check skin color and respirations frequently until fully reacted.

You and Your Business

1958 MICHIGAN CLINICAL INSTITUTE

Only information of practical value in daily practice will be found at the 1958 Michigan Clinical Institute, to be held at the Sheraton-Cadillac Hotel, Detroit, March 19-20-21 (program begins on page 1589). All subjects on the MCI Program are applicable to clinical medicine. The 1958 Institute is a concentrated refresher course of great value to Michigan practitioners of medicine.

Well over 3,000 will be registered (last year's total attendance was 3,243), so *secure your hotel reservations now.*

PAYMENT FOR CARE OF MILITARY PERSONNEL (not "Medicare")

Military personnel of the Army, who are on authorized absence, should have in their possession Department of Army Form No. 31, "Request and Authority for Absence." The reverse side of this form contains instructions pertaining to medical treatment or hospitalization that may be required while a military person is absent from his home station. Failure to follow these instructions sometimes results in delay in processing bills for care provided by civilian physicians and hospitals. Physicians and hospitals who treat military personnel are urged to assist them in notifying the proper military authorities.

The processing and payment of bills for the care of military personnel should not be confused with the Medicare Program for dependents.

WHAT'S YOUR ZONE NUMBER, DOCTOR?

The U. S. Post Office Department has issued a new requirement that the postal zone be included in all addresses for mail other than first class. Since MSMS has considerable materials to send to you that do not require First Class postage, we would appreciate your executing the following coupon and returning to the Michigan State Medical Society, P. O. Box 539, Lansing 3, Michigan. This will allow us to check your mailing address and add your zone number to our address plates. Thank you.

WILFRID HAUGHEY, M.D., *Editor*

Name: .....

Address: .....

City: ..... Zone: .....

(Please print or type throughout)

INTERNATIONAL ACADEMY OF PROCTOLOGY AWARD CONTEST

The International Academy of Proctology announces its Annual Cash Prize and Certificate of Merit Award Contest for 1957-1958. The best unpublished contribution on proctology or allied subjects will be awarded $100.00 and a Certificate of Merit. The winning contribution will be selected by a Board of impartial judges, and all decisions are final.

The formal award of the First Prize, and presentation of other Certificates, will be made at the Annual Convention Dinner Dance of the International Academy of Proctology, April 11, 1958, at the Hotel Del Prado, Mexico City, Mexico.

The International Academy of Proctology reserves the exclusive right to publish all contributions in its official publication, "The American Journal of Proctology." All entries are limited to 5,000 words, must be typewritten in English, and submitted in five copies. All entries must be received no later than the first day of February, 1958. Entries should be addressed to: Alfred J. Cantor, M.D., International Secretary, 147-41 Sanford Avenue, Flushing, New York.

AMERICAN BOARD OF OBSTETRICS AND GYNECOLOGY

The Part I examinations of the American Board of Obstetrics and Gynecology, are to be held in various parts of the United States and Canada, on Thursday, January 2, 1958, at 2:00 P.M.

Candidates notified of their eligibility to participate in Part I must submit their case abstracts within thirty days of notification of eligibilty. No candidate may take the written examination, unless the case abstracts have been received in the office of the Secretary. Re-submitted cases were due November 1, 1957.

Current bulletins outlining present requirements may be obtained by writing to the Secretary's office: Robert L. Faulkner, M.D., 2105 Adelbert Road, Cleveland 6, Ohio.

CONFERENCE ON CARE OF THE OLDER PERSON

A Conference for Physicians and all others interested in the care of older persons will be held at Ann Arbor, January 13, 14, 15, 1958. It is being co-sponsored by the Michigan State Medical Society Geriatrics Committee and the Michigan Society of Gerontology.

Live clinics will be held each day at the University Hospital, and all aspects of the care of the patient will be covered—while the medical care

(Continued on Page 1522)

CARE OF THE OLDER PERSON

(Continued from Page 1520)

will be particularly stressed for the physicians present, including psychiatric evaluation and care, the sociologic, psychologic, economic and home-care phases will also be included.

Our population is growing older, and it behooves all physicians to familiarize themselves, more than ever before, with the many aspects of the overall care of the geriatric patient.

HIGHLIGHTS OF THE EXECUTIVE COMMITTEE OF THE COUNCIL
Meeting of October 16, 1957

- **Total registration** at the 92nd Annual Session, Grand Rapids, was 3,290, including 1,595 M.D.'s.
- **Site for New Building of MSMS.**—The Site Committee presented a report on various locations available. None was considered adequate, and the Site Committee was requested to continue its investigation.
- **Meeting conflicts** in March and September were reported and thoroughly discussed. The Executive Committee developed a resolution: "That MSMS feels that the months of March and September, annually, should be left open for the statewide meetings sponsored by the Michigan State Medical Society and that ancillary groups, hospitals, and medical schools be respectfully requested to refrain from scheduling statewide meetings during these months, to the end that all members of the Michigan State Medical Society may be given adequate opportunity to attend the MSMS meetings."
- **Opinion Study on Prepaid Medical Care Coverage in Michigan:** The Executive Committee received so many requests for copies of this report that it authorized the printing of 1,000 additional copies in complete form.
- **Motion picture on costs of medical care** was authorized to be made by MSMS.
- **1958 Michigan Clinical Institute:** Assembly Chairmen appointed were H. K. Ransom, M.D., Ann Arbor, E. J. Lauretti, M.D., Muskegon, R. W. Waggoner, M.D., Ann Arbor, M. S. Chambers, M.D., Flint, Wm. S. Reveno, M.D., Detroit, D. W. Thorup, M.D., Benton Harbor and F. E. Luger, M.D., Saginaw. Assembly Secretaries appointed were N. J. Hershey, M.D., Niles, A. H. Ulmer, M.D., Port Huron, S. E. Chapin, M.D., Dearborn, T. J. Trapasso, M.D., Sault Ste. Marie, and G. E. Millard, M.D., Detroit.
- **Change in Schedule for MSMS Annual Sessions:** In 1958 and subsequently, the Annual Session will begin on Tuesday at 2:00 p.m. and end Friday at 1:00 p.m., to take advantage of the more popular Tuesday evening for meetings of ancillary groups and to permit wet clinics, when desired, on Friday afternoon. Also, a larger daytime attendance on Tuesday can be anticipated than on Friday.
- **Council Chairman, D. Bruce Wiley, M.D.,** of Utica, announced the personnel of all Committees of The Council for 1957-58.
- **Legal Counsel, Lester P. Dodd,** reported that the Kopprasch case of Allegan County had been dismissed so far as MSMS is concerned. The court held that the issue of conspiracy had not been established.
- **The Beaumont Memorial Foundation:** Incorporation has been accomplished and the following officers have been elected: President, Otto O. Beck, M.D., Birmingham; Vice President, W. M. LeFevre, M.D., Muskegon; Secretary-Treasurer, Wm. J. Burns, LL.B., Lansing.
- **Several matters of mutual interest** were discussed with Michigan Health Commissioner A. E. Heustis, M.D., including influenza, paralytic poliomyelitis, hearing on radiation standards (set for October 31), rheumatic fever prophylaxis, nursing home licensing and possibility of research project on standards of screening for cardiovascular diseases.
- **Appointments:** I. A. LaCore, M.D., of Pontiac to represent MSMS at the fourth annual conference of Mental Health Representatives of State Medical Societies, Chicago, November 22-23; W. B. Harm, M.D., Detroit, as Appeal Board member, North Central Area, Selective Service System; Wilfrid Haughey, M.D., to State Medical Journal Advertising Bureau Conference, Chicago, October 28-29; Max L. Lichter, M.D., Melvindale, to attend the Civil Defense Meeting of the AMA, Chicago, November 9-10.

WHAT THEY THOUGHT ABOUT THE MSMS ANNUAL SESSION

Max Cutler, M.D., Beverly Hills, California (guest essayist): "I want to say a word about the organization of your meeting. Over the years I have naturally been on many programs throughout this country and other parts of the world but I can truthfully say that I have known no group who prepared for the meeting in the comprehensive way you have done. The minute details you have attended are simply wonderful and I do want to congratulate you and your group on this approach."

Douglas T. Davidson, Jr., M.D., Philadelphia (guest speaker): "I can frankly say that I am greatly impressed by the efficiency of your State Medical Society Assembly Committee. No detail was overlooked in the effort to assure the speakers what was expected of them, at what time and where, and long enough in advance and often enough that they couldn't forget. I was even more impressed by your warm hospitality from the moment I stepped off the plane, through my stay in Grand Rapids until I reluctantly returned to the work shop here. It was a real treat for me from beginning to end. Meetings with your group was a stimulating and most enjoyable experience which I shall look forward to repeating whenever the opportunity permits."

AMA Washington Letter

THE MONTH IN WASHINGTON

Health-Research Money

Just how much money does the federal government spend on health programs and just how is it spent?

The answers are not easy to come by, but each year the Washington Office of the American Medical Association gathers together all of the bits and pieces of information needed to explain where and how the U.S. is involved in medicine, from cancer research to treating workmen's sniffles. Some of the material comes directly from appropriation bills, but where programs and projects are not identified there, the responsible government officials are consulted for the breakdown.

For all health and medical purposes, the U.S. during the current fiscal year is spending approximately two and one-half billion dollars. This —despite months of economy talk in the administration and in Congress earlier in the year—is about the same figure as last year.

The survey also unearthed some interesting sidelights that show perhaps more graphically than the dollar marks the extent to which federal medical activities are spreading among almost all agencies and departments.

At least twenty-three U.S. cabinet departments and independent agencies are engaged in some medical operations, and there are at least seventy-nine separate health-medical activities worthy of listing and describing. Many of these in turn are responsible for scores and scores of individual operations.

This year the relatively new Department of Health, Education and Welfare tops the list of all departments in health-medical spending with $849,394,800, bounding past Veterans Administration and Defense Department, which up to now have been at the head of the column. VA is spending $849,374,000, within $20,000 of HEW, but Defense Department this year drops back more than $80 million, to $702,000,000, largely because the decreasing size of the armed forces means fewer uniformed men and dependents to care for.

Next comes Atomic Energy Commission, but its medical spending of $40 million—mostly for research—is far down the column from the Big Three.

International Co-operation Administration has $37 million to help our friends overseas to raise their medical standards. The other 19 departments and agencies have substantially less, the last item being the $12,145 allocated to the physician entrusted with keeping members of Congress as healthy as possible.

For the first time the AMA report compiles information on the programs in which the U.S. participates for payments because of disability. Among those receiving these payments are veterans, disabled beneficiaries under social security, disabled railroad workers, etc.

Because this money is not all federal and comes from several tax sources—OASI and railroad payroll deductions as well as general U.S. revenue—it is not added to other federal medical costs in the AMA study. For the current fiscal year the total of these "payments for disability" is about $3.2 billion.

NOTES: Federal Trade Commission and Food and Drug Administration joined together to warn drug manufacturers against using "false and misleading claims" to promote drug products for use against Asian influenza. It was pointed out that vaccine is the only protection, and that a physician is needed if there are complications.

* * *

Meeting at the invitation of the Children's Bureau, a group of specialists in the health fields discussed use of X-rays of the newborn and pregnant women and concluded that restraint must be exercised.

* * *

There has been remarkable progress in the last five years in the fight against tuberculosis, but there are still at least 250,000 active cases in the United States. This is the gist of a special nationwide survey by Public Health Service and the National Tuberculosis Association.

* * *

While visiting Russian women scientists were telling of a 25-cent drug to treat Asian influenza, it was learned that some members of the Russian Embassy staff in Washington had been vaccinated with American vaccine.

* * *

In a major address, President Eisenhower pleaded for more private financial aid to medical colleges and warned against the dangers of federal controls in this field.

* * *

Reversing a previous policy, the Internal Revenue Service now says it is possible for a group of doctors to practice as an "association," thereby qualifying for approximately the same tax benefits they would receive under the proposed Jenkins-Keogh law.

Relieve moderate or severe pain

Reduce fever

Alleviate the general malaise of upper respiratory infections

'TABLOID'

'EMPIRIN' COMPOUND®

WITH

CODEINE PHOSPHATE*

maximum codeine analgesia/optimum antipyretic action

*Subject to Federal Narcotic Regulations

BURROUGHS WELLCOME & CO. (U.S.A.) INC., Tuckahoe, New York

Symbols

OF PROVEN PAIN RELIEF

gr. 1

gr. ½

gr. ¼

gr. ⅛

Formulas for dependable relief...

...from moderate to severe pain complicated by tension, anxiety and restlessness.

'CODEMPIRAL'® NO. 3*

Codeine Phosphate	gr. ½
Phenobarbital	gr. ¼
Acetophenetidin	gr. 2½
Aspirin (Acetylsalicylic Acid)	gr. 3½

'CODEMPIRAL'® NO. 2*

Codeine Phosphate	gr. ¼
Phenobarbital	gr. ¼
Acetophenetidin	gr. 2½
Aspirin (Acetylsalicylic Acid)	gr. 3½

...from pain of muscle and joint origin, simple headache, neuralgia, and the symptoms of the common cold.

'TABLOID'

'EMPIRIN' COMPOUND®

Acetophenetidin	gr. 2½
Aspirin (Acetylsalicylic Acid)	gr. 3½
Caffeine	gr. ½

...from mild pain complicated by tension and restlessness.

'EMPIRAL'®

Phenobarbital	gr. ¼
Acetophenetidin	gr. 2½
Aspirin (Acetylsalicylic Acid)	gr. 3½

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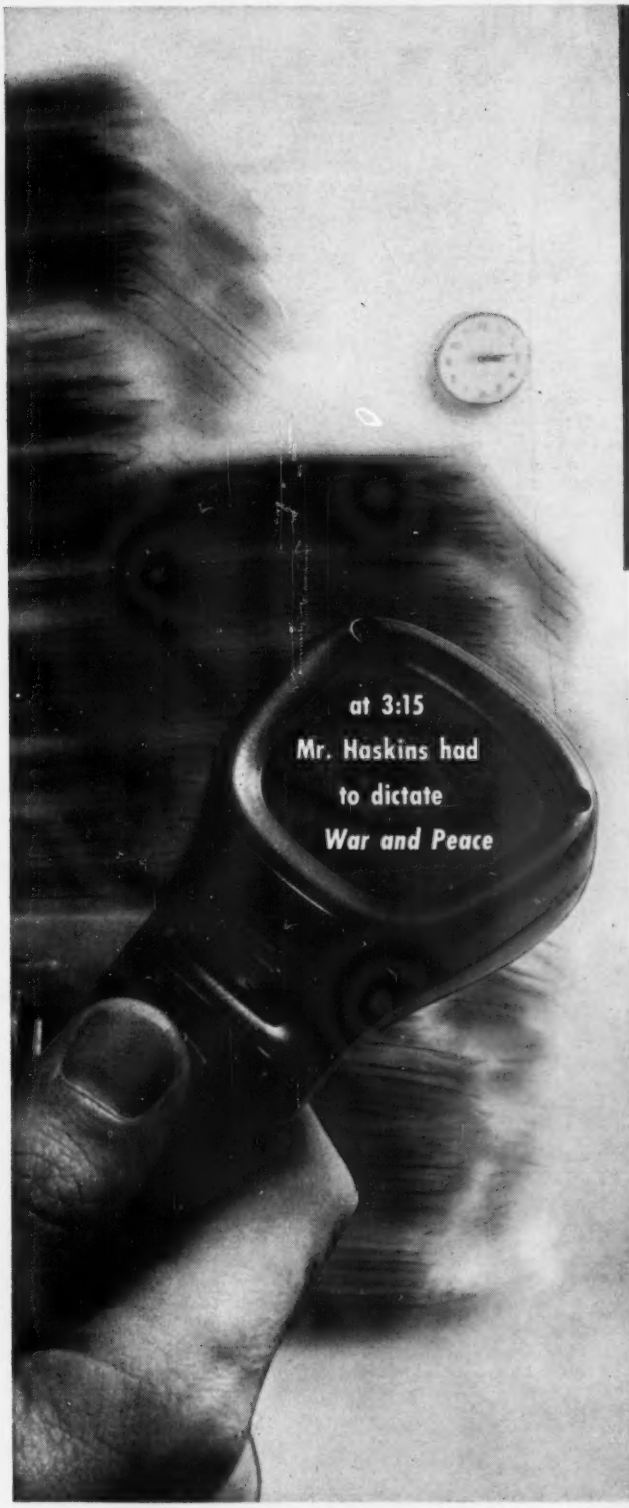

To cut daytime lethargy
(and keep rauwolfia potency)
in treatment
of hypertension:

Additional clinical evidence[1] supports the view that HARMONYL offers full rauwolfia potency coupled with much less lethargy. In a new comparative study HARMONYL was given at the same dosage as reserpine and other rauwolfia alkaloids. Only one HARMONYL patient in 20 showed lethargy, while 11 patients in 20 showed lethargy with reserpine; 10 in 20 with the alseroxylon fraction.

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for your hypertensives
who must stay on the job

Harmonyl

while the drug works effectively . . .
so does the patient

*Trademark for Deserpidine, Abbott

1. Winsor, Travis: Comparative Effects of Various Rauwolfia Alkaloids in Hypertension; submitted for publication.

AMA News Notes

INDUSTRIAL HEALTH CONGRESS IN MILWAUKEE

Maintaining high standards of health in industry will be a principal topic of consideration at the 18th annual Congress on Industrial Health to be held January 27-29 at the Schroeder Hotel in Milwaukee. Physicians, nurses, industrial hygienists, engineers and others interested in the field will attend the meeting sponsored by the AMA's Council on Industrial Health.

Recent developments in industrial health programs and various aspects of immunization programs in industry will be among the subjects covered by panelists at a special session co-sponsored by chairmen of state medical society committees on industrial health. Other features include three technical sessions on: (1) general aspects of disability evaluation; (2) industrial dermatitis, causes and evaluation of disability; (3) low back pain, cause, treatment, evaluation of disability, rehabilitation.

NEW EXHIBITS IN 1958

To reach more and more Americans with authentic up-to-date health information, the AMA's Bureau of Exhibits announces a number of major plans for 1958. First, a new exhibit titled "How We Breathe" will be ready for bookings after January 1, 1958. This exhibit will present a three dimensional model of the organs involved in breathing—the nose, pharynx, larynx, bronchial tubes and lungs. Other features include actual preserved human lungs; a unit to demonstrate the mechanism of breathing and the part played by the diaphragm and rib cage, and a section showing the exchange of oxygen from the lungs to the blood and carbon dioxide from the blood to the lungs.

Two other exhibits also are well along in the planning stages for next year: (1) the brain and nervous system, featuring a human brain embedded in plastic and (2) the endocrine system. Further details will be announced later.

Finally, small editions of the popular "Life Begins" exhibit are being built, incorporating most of the information in the large exhibit but displaying only one fetus embedded in plastic. Other fetuses in varying stages of development will be shown pictorially. This type of exhibit is extremely lightweight and should prove most attractive to those medical societies far away from Chicago.

TWO "NOMENCLATURE" INSTITUTES IN 1958

So popular have the Nomenclature Institutes been that the American Medical Association again plans to sponsor two more of these short courses during 1958. The first will be conducted March 31 to April 2 at Tulsa, Oklahoma. The second will be held in July in Boston. These three-day meetings are planned by the AMA as a special service to medical record librarians and others working with the *Standard Nomenclature of Diseases and Operations* in the hospital, clinic or doctor's office. Lectures are given by Edward T. Thompson, M.D., Nomenclature editor, and chief, intermural research activities, division of hospital facilities, USPHS, Washington, D. C., and Adaline C. Hayden, C.R.L., Nomenclature associate editor. Queries should be sent to the AMA.

FIRST COME, FIRST SERVED

It's time for medical societies to begin planning for 1958 county and state fairs. The AMA Bureau of Exhibits urges all medical societies to arrange for bookings of specific health exhibits as soon as possible. A number of commitments for some of the more popular exhibits have already been made.

SURVEY OF COUNTY MEDICAL SOCIETIES

Replies to the questionnaires sent to county medical societies concerning their activities and programs have been tabulated and published in booklet form by the AMA's Council on Medical Service. The booklet—"1957 Nationwide Survey on County Medical Society Activities"—contains information on types of county medical society programs (such as emergency call systems or grievance committees), fee schedules, life insurance, attendance at meetings and dues. Copies will be sent to all county and state medical societies. Additional copies may be secured from the Council.

MEDICAL MEETINGS AND CLINIC DAYS

1958		
Jan. 13-15	11th Annual Michigan Rural Health Conference	Ann Arbor
Jan. 22-23	Physicians conference on Gerontology and Michigan Gerontology Society	Ann Arbor
Feb. 1-2	MSMS County Secretaries—Public Relations Seminar, Statler Hotel	Detroit
Feb. 12	Genesee County Medical Society—Maternal Health Day	Flint
March 19-21	Michigan Clinical Institute, Sheraton-Cadillac Hotel	Detroit
April 9	Genesee County Medical Society—Cancer Day	Flint
Spring	MSMS Postgraduate Extramural Courses	Statewide
May 14	Conference on Rehabilitation—Kellogg Center Michigan State University	East Lansing

why wine in geriatrics and convalescence?

Convalescents, regardless of their years, share many of the tonic and recuperative needs of the aged, and wine is probably more widely recommended in the care of these patient groups than in any other.

Many generations of physicians have warmly advocated not only dry table wines but also sweet dessert wines of many varieties for their nutritional value in elderly and convalescent patients.

Now modern research supplies the raison d'être by clearly showing that wine not only supplies quick fuel but also serves to stimulate the desire for food where appetite is poor.

WINE AIDS DIGESTION—Wine has been found to increase salivary flow,[1] stimulate gastric secretion[2] and facilitate the gastrocolic reflex.[3]

WINE FOR GENTLE, SAFE SEDATION—Described as the safest of all sedatives, wine can often dispel the anxieties, fears and emotional pressures of old age and prolonged illness. The relaxation of gastric tension produced by moderate amounts of wine may be a significant factor in the prevention of dyspepsia. The systemic sedative[4] and vasodilative[5] actions of wine can be of great aid in cardiovascular disease.

For a few cents a day your patients can have wines produced from the world's finest grape varieties grown in an ideal climate and handled with consummate skill.

Research information on wine is available on request. Just write for your copy of "Uses of Wine in Medical Practice." Wine Advisory Board, 717 Market Street, San Francisco 3, California.

1. Winsor, A. L., and Strongin, E. I.: J. Exper. Psychol. 16:589 (1933).
2. Ogden, E., and Southard, Jr., F. D.: Fed. Proceedings 5:77 (1946).
3. Adler, H. F.; Beazell, J. M.; Atkinson, A. J., and Ivy, A. C.: Quart. J. Studies on Alc. 7:638 (1941).
4. Salter, W. T.: Geriatrics 7:317 (1952).
5. Wright, I. S., Arteriosclerosis, in Steiglitz, E. J.: Geriatric Medicine, Philadelphia, W. B. Saunders Co. (1949).

PR REPORT

LEGISLATIVE SESSION CONVENES JANUARY 8

The House and Senate will get right down to business on the second Wednesday of the new year, and if they proceed according to previously adopted rules, they will be in Lansing for only eleven weeks.

Only the weightier problems of state are expected to get much attention during this short session as 1958 is an election year. Just how much consideration can be expected on the many anticipated health proposals cannot be predicted.

The MSMS Council and the House of Delegates have made specific legislative recommendations regarding highway safety, enlargement of Wayne's Medical School facilities, annual registration of M.D.'s, narcotics, TB and atomic materials-radiation controls. It looks like a busy three months.

The same committee assignments as last year will prevail. However, House Democrats will have to select a new floor leader to replace resigning minority spokesman Ed. Carey (Wayne County) who was last month elected to the Detroit Common Council.

MOUNTAIN COMES TO MAHOMET IN WAYNE COUNTY

Better communication between state and county medical society is the purpose of a new series of meetings with society officers and hospital staffs in Wayne County.

The program was developed to provide personal contact with as many of the 2,600 members of the County Society as possible.

Commenting on the success of the meetings, Louis J. Bailey, M.D., President of the Wayne County Medical Society, said:

"At each meeting, Society officers have reported on the important activities of both state and local medical organizations. The staffs have displayed high interest in these meetings and out of them have come constructive suggestions that might benefit the Society as a whole."

MSMS representatives covering one or more meetings include Drs. William Bromme, W. B. Harm, M. L. Lichter, G. T. McKean, G. B. Saltonstall, A. E. Schiller, and D. B. Wiley. WCMS official representatives include Doctors L. J. Bailey, C. L. Candler, E. F. Fenton, C. P. Hodgkinson, L. W. Korum, C. I. Owen, F. P. Rhoades, W. L. Sherman, D. N. Sweeny, Jr., and M. R. Weed.

Twenty-one hospitals were visited during October November, and December with arrangements being handled by Jack Pardee, MSMS Public Relations Field Secretary of the Detroit office.

ATOMIC ENERGY AND HEALTH

The atom and health dominates the 11th Annual Michigan Rural Health Conference with an impressive array of lectures and discussions of special importance to the medical profession. The two-day meeting will be held at the Michigan Union, University of Michigan, Ann Arbor, on Wednesday and Thursday, January 22-23, 1958.

Professional Day—a day set aside especially for doctors of medicine, dentists, nurses, and others with similar interests—is scheduled for Thursday, January 23. The Council of the Michigan State Medical Society has approved the expenses for one delegate from each County Medical Society.

Professional Day Program

(10:00 a.m.-12:30 p.m.)

CONFERENCE THEME—THE ATOM AND HEALTH

Chairman: **Harry A. Towsley, M.D.,** Ann Arbor

"Impact of Radiation Fallout"
James V. Neel, M.D., Ann Arbor

PANEL-SYMPOSIUM: "Utilization of Health Personnel in Suburban and Rural Areas in Time of Disaster"

Moderator: **Harry B. Zemmer, M.D.,** Lapeer

"Flint Tornado Experience"
Sidney N. Lyttle, M.D., Flint

"Consumers Power Building Collapse"
Grant L. Otis, M.D., Jackson

"Hospital Organization"
C. Thomas Flotte, M.D., Ann Arbor

"The Atom as a Diagnostic Tool"
William H. Beierwaltes, M.D., Ann Arbor

"The Atom as a Therapeutic Tool"
Frank H. Bethell, M.D., Ann Arbor

While the Professional Day program on Thursday morning is of primary interest to doctors of medicine, many of the other presentations are well worth their attention. The topics and speakers are:

- "Peacetime Application of Atomic Energy"—**James Brinson, M.D.,** Captain, Medical Corps, U. S. Navy Flight Surgeon attached to Surgeon General's Office, Washington D. C. (Wednesday, January 22, 10:45 a.m.)
- "Radiation in Food"—**Henry Gomberg, Ph.D.,** Ann Arbor
  (Wednesday, January 22, 11:15 a.m.)
- "Effects of Radiation on the Body"—**James V. Neel, M.D.,** Ann Arbor
  (Wednesday, January 22, 11:45 a.m.)
- "What Makes a Doctor"—**A. C. Furstenberg, M.D.,** Ann Arbor
  (Part of Panel Presentation, Wednesday, January 22, 1:30 p.m.)
- "Prevention of Home Accidents"—**Robert H. Trimby, M.D.,** Lansing, Secretary, Ingham County Medical Society (Part of Panel Presentation, Wednesday, January 22, 1:30 p.m.)

(Continued on Page 1532)

NOW, FROM ROBINS, A NEW AND UNEXCELLED ANTIHISTAMINE

why Dimetane is the best reason yet for you to re-examine the antihistamine you're now using

» *Milligram for milligram, DIMETANE potency is unexcelled.* DIMETANE has a therapeutic index unrivaled by any other antihistamine—a relative safety unexceeded by any other antihistamine. DIMETANE, even in very low dosage, has been effective when other antihistamines have failed. Drowsiness, other side effects have been at the very minimum.

» unexcelled antihistaminic action

Diagnosis	No. of Patients	Response				Side Effects
		Excellent	Good	Fair	Negative	
Allergic rhinitis and vasomotor rhinitis	30	14	9	5	2	Slight Drowsiness (3)
Urticaria and angioneurotic edema	3	1	1	1		Dizzy (1)
Allergic dermatitis	2		1	1		Slight Drowsiness (2)
Bronchial asthma	1		1			
Pruritus	1		1			
Total	37	15	13	7	2	Drowsiness (5) Dizzy (1) 16.2%

From the preliminary **Dimetane Extentabs** studies of three investigators. Further clinical investigations will be reported as completed.

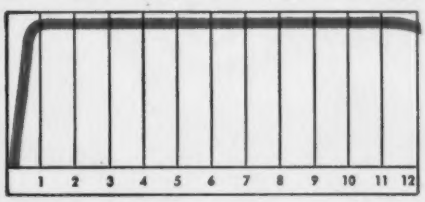
Dimetane

it's easy to remember Di´me tane

IIMETANE® EXTENTABS® TABLETS ELIXIR

DIMETANE IS PARABROMDYLAMINE MALEATE – EXTENTABS 12 MG., TABLETS 4 MG., ELIXIR 2 MG. PER 5 CC.

a blanket of allergic protection, covering 10-12 hours—with just one Dimetane Extentab » *DIMETANE Extentabs protect patient for 10-12 hours on one tablet.*



Periods of stress can be easily handled with supplementary DIMETANE Tablets or Elixir to obtain maximum coverage.

Dosage:

***Adults**—One or two 4-mg. tabs. or two to four teaspoonfuls Elixir, three or four times daily. One Extentab q.8-12 h. or twice daily.*

***Children over 6**—One tab. or two teaspoonfuls Elixir t.i.d. or q.i.d., or one Extentab q.12h.*

***Children 3-6**—½ tab. or one teaspoonful Elixir t.i.d.*

A. H. ROBINS CO., INC.

Robins

Richmond, Virginia | Ethical Pharmaceuticals of Merit Since 1878

Cancer Comment

BETTER CONTROL OF CANCER OF THE UTERUS

Of the various pelvic malignancies, carcinoma of the cervix is the most accessible. It gives the best opportunity to the physician for observation, early detection, possible prevention and either arrest or cure. Unfortunately, we have been unable to exploit to its full potential these facts in favor of the patient. However, progress is being made—there is unanimity on many aspects of this problem. Medical men are increasing their efforts in this direction—a situation which will likely increase our control of cervical cancer.

During the course of 1957, we shall diagnose 35,000 new cases of cancer of the uterus in the United States. Twenty-six thousand of these, or about 74 per cent, will be cancers of the cervix.

The control that we have established over uterine cancer is well documented by statistical studies:

1. Of patients who are diagnosed early and treated without delay, 70 per cent live the five-year period which we consider a "cure," and the majority of these actually are cured.
2. Only one-third of the patients who present themselves when the disease is moderately advanced survive the five-year period or can hope to be cured.
3. Very few survive for long if they present themselves with advanced cancer and/or metastasis.

In short, early diagnosis and prompt, effective treatment largely predetermine our control of this disease.

While deaths from uterine cancer have been decreasing since 1934, we must note that the reasons for this development are not entirely clear. A variety of factors undoubtedly are involved, such as the taking of more complete and more detailed histories, the performance of more pelvic examinations, the widespread utilization of biopsy, better medical care and the increased awareness on the part of the public of the advisability of immediate medical attention when unusual physical signs and symptoms appear.

However, there is no positive evidence that any one of these factors, or any combination of them is responsible for the 45 per cent decrease in the mortality rate, as reported by the New York State Department of Health.

Only one fact is firmly established. Therefore, of only this one fact can we speak with absolute confidence. The patient whom we can diagnose and treat when her disease is at an early stage is the patient we are most likely to save. It is the certainty of this fact that brings into relief the seriousness of the familiar problem of too many patients presenting themselves to their physicians for the first time with a clinical picture of advanced cancer.

To cope with this problem, we must act to increase our opportunities for diagnosis early enough to begin treatment when the possibilities for clinical control of the disease are at their optimum stage.

We have the means for the job in cancer of the uterus. The reliability of vaginal cell examination for cancer has been proved by impressive and continuously mounting statistical evidence. One of the great advantages of this method is that it often proves the presence of cancer before clinical signs are visible or palpable.

HARRY M. NELSON, M.D.
Chairman, Michigan Cancer Coordinating Committee

ATOMIC ENERGY AND HEALTH

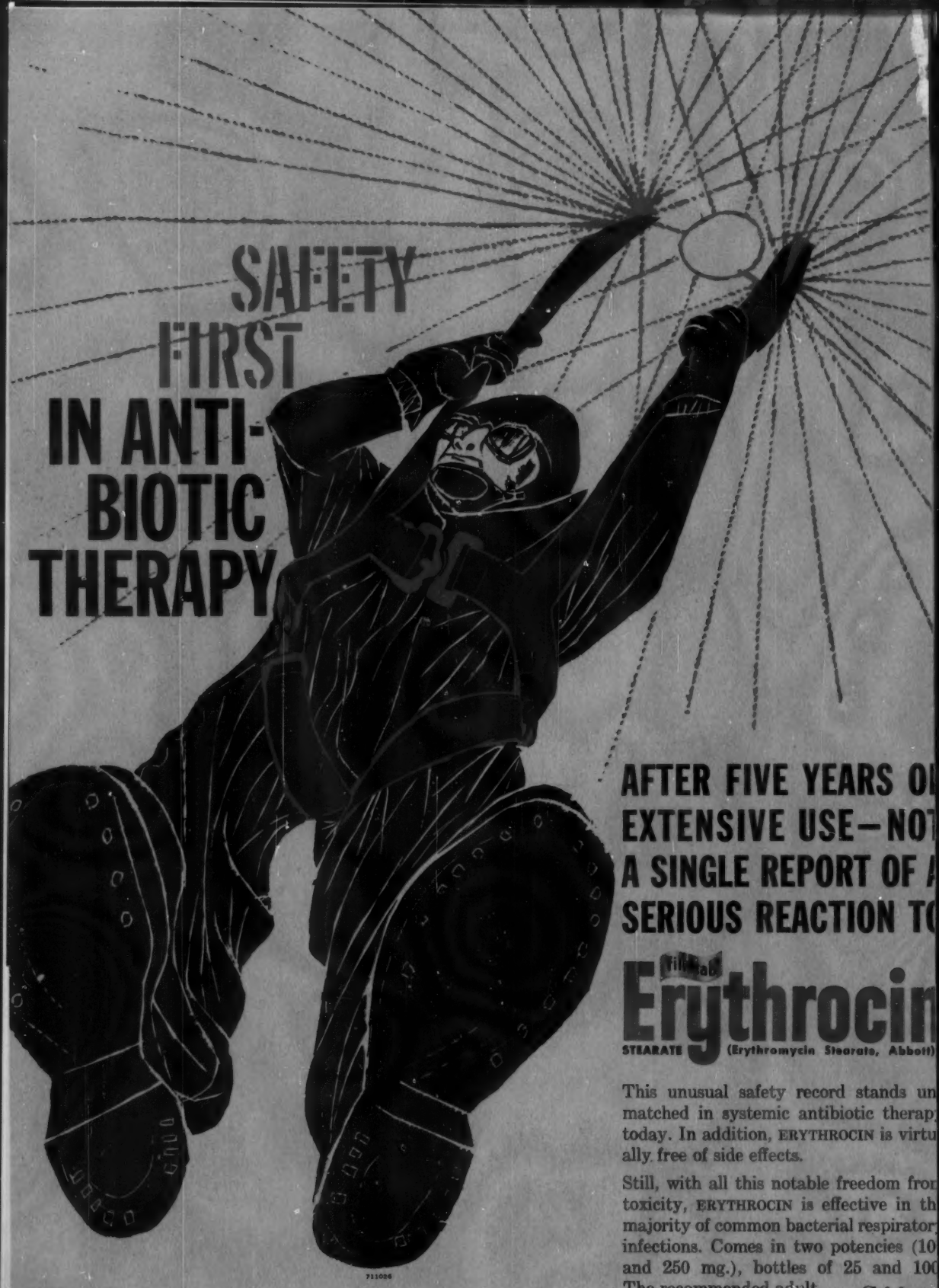
(Continued from Page 1528)

- "Poison Control Centers"—**George H. Lowrey, M.D.,** Ann Arbor
  (Part of Panel Presentation, Wednesday, January 22, 1:30 p.m.)
- "Human Diseases from Animal Carriers"—**Franklin H. Top, M.D.,** Professor of Hygiene and Preventive Medicine, Iowa College of Medicine (Wednesday, January 22, 4:30 p.m.)
- "What Health Means to Me"—**Alexander G. Ruthven, Ph.D.,** President Emeritus, University of Michigan Luncheon Speaker, Thursday, January 23, 12:30 p.m.)

The socio-economic factors in health will be discussed on Thursday, January 23, at 2:00 p.m. in a panel moderated by L. Fernald Foster, M.D., Detroit, Secretary of the Michigan State Medical Society. Panel members and their topics include "The Opinion Study on Prepaid Medical Care Coverage in Michigan" by Hugh W. Brenneman, Lansing, Public Relations Counsel of the Michigan State Medical Society, and "Changes in the Blue Shield Plan" by Jay Ketchum, Detroit, Executive Vice-President and General Manager, Michigan Medical Service. An hour later that same afternoon, William McNary, Detroit, Executive Vice-President and Generál Manager of Michigan Hospital Service, will take part in a panel-symposium and discuss "The Blue Cross Program in the Hospitals."

Following the Conference theme, "Atom and Health," the annual banquet on Wednesday evening will feature a talk by Robert W. Hartwell, Detroit, General Manager of the Power Reactor Development Company on "The Enrico Fermi Atomic Power Plant." This is the atomic reactor plant now under construction at Monroe, Michigan.


SAFETY FIRST



AFTER FIVE YEARS OF EXTENSIVE USE—NOT A SINGLE REPORT OF A SERIOUS REACTION TO

Filmtab Erythrocin

STEARATE (Erythromycin Stearate, Abbott)

This unusual safety record stands unmatched in systemic antibiotic therapy today. In addition, ERYTHROCIN is virtually free of side effects.

Still, with all this notable freedom from toxicity, ERYTHROCIN is effective in the majority of common bacterial respiratory infections. Comes in two potencies (100 and 250 mg.), bottles of 25 and 100. The recommended adult dose is 250 mg. q.i.d.

Abbott

©Filmtab—Film-sealed tablets, Abbott; pat. applied for.

New Chemotherapy

ARALEN® *in* RHEUMATOID ARTHRITIS

Extensive studies of rheumatoid arthritis and related collagen diseases—in this country and abroad—have shown the antimalarial Aralen phosphate to be highly effective and well tolerated in a large percentage of patients.

Clinical Results with Aralen in Rheumatoid Arthritis

Author	No. of Cases	Major Improvement	Minor Improvement	No Effect
Hayda[1]	28	22	5	1
Rinehart[2]	25	12	4	9
Freedman[3]	50	43	3	4
Bagnall[4]	108	77	12	19
Bruckner[5]	36	32	0	4
Cohen and Calkins[6]	22	17	3	2
Scherbel et al.[7]	25	9	8	8
Total	294	212 (72%)	35 (12%)	47 (16%)

- Success dependent upon persistent treatment
- Often of benefit where other agents have failed
- Remissions on therapy well maintained
- Remission of 3 to 12 months possible even if treatment is interrupted
- Tachyphylaxis not evident

GENERAL EFFECTS:

- Patient feels better
- Patient looks better
- Exercise tolerance increases
- Walking speed and hand grip improves

LABORATORY EFFECTS:

- E. S. R. may fall slowly
- Hemoglobin level may gradually rise

ANALGESICS AND STEROIDS:

- Requirements usually reduced or eliminated

JOINT EFFECTS:

- Pain and tenderness relieved
- Mobility increases
- Swellings diminish or disappear
- Muscle strength improves
- Rheumatic nodules may disappear
- Even severe or advanced deformity may improve
- *Active* inflammatory process usually subsides
- Joint effusion may diminish

DOSAGE:

Aralen is cumulative in action and requires four to twelve weeks of administration before therapeutic effects become apparent.

Latest information indicates that an initial daily dose of 250 mg. of Aralen phosphate is preferable to the higher doses sometimes recommended. However, if side effects appear, withdraw Aralen for several days until they subside. Reinstate treatment with 125 mg. daily and, if well tolerated, increase to 250 mg. The usual maintenance dose is 250 mg. daily.

New Chemotherapy

INDICATIONS:

- Rheumatoid arthritis, acute or chronic —with or without adjunctive therapy.
- Spondylitis
- Arthritis associated with lupus erythematosus or psoriasis

THEORY OF ACTION:

Aralen appears to suppress or induce remission of rheumatoid inflammatory processes by inhibiting adenosinetriphosphatase.

HOW SUPPLIED:

Aralen phosphate: 250 mg. tablets in bottles of 100 and 1000.
125 mg. tablets in bottles of 100.

Tolerance:

Aralen is usually well tolerated. Toxic effects are usually mild and to date have been transitory in nature, disappearing completely either on continuance or cessation of therapy or on reduction in dosage.

Gastrointestinal disturbances (e.g. nausea, rarely vomiting, diarrhea, abdominal cramps, anorexia) are frequent manifestations of intolerance. Temporary blurring of vision (due to interference with accommodation) is also relatively frequent.

Pleomorphic skin eruptions (e.g. lichenoid, maculopapular, purpuric), although generally mild, may preclude the use of an optimum dosage schedule. If a skin reaction persists on a reduced dosage schedule, or recurs after reinstitution of treatment with gradually increasing doses, discontinue Aralen till the lesion again disappears and consider resuming treatment with Plaquenil® (brand of hydroxychloroquine).

Less frequently transitory vertigo, headache, lassitude, or neurological disturbances, such as nervousness, irritability, emotional change, and nightmares have been reported. Instances of unexplained slight gradual weight loss as the patient's general health and arthritic condition improved have been mentioned. Occasional instances of bleaching (depigmentation) of the hair have been described.

Although an occasional instance of leukopenia, with normal differential count, has been reported (WBC about 3000), it has not proved troublesome because it has always been reversible on discontinuance, or diminution of the dose. Even spontaneous reversal may occur while full dosage is maintained.

Caution:

Aralen is known to concentrate in the liver and, although hepatic damage has never been reported, the drug should be used with caution in the presence of liver disease. In the presence of severe gastrointestinal, neurological, or blood disorders, the drug should be used with caution or not at all. If such disorders occur during the course of therapy, the drug should be discontinued. Concomitant use of gold or phenylbutazone with Aralen should be avoided because of the tendency of these agents to produce drug dermatitis.

Clinical Comments:

Of fifty patients receiving Aralen therapy, "43 have become really well; that is, they have no stiffness, and any pain that occurs can reasonably be attributed to use of joints affected by secondary degenerative changes. They have no evidence of joint inflammation, but may have a raised erythrocyte sedimentation rate. They have little or no need for analgesics." *Freedman*[3]

"One hundred and twenty-five private patients have been carefully followed clinically and haematologically while receiving well over 200 patient-years of chloroquine [Aralen] therapy. The results are considered good in 70%, one-half of these cases being in remission. Improved work performance, sedimentation rate, and hemoglobin levels paralleled the major objective gain in this 70%. 90% of them remained on chloroquine [Aralen] therapy, half for more than two years. Classical peripheral rheumatoid arthritis, spondylitis, arthritis of juvenile onset, and rheumatoid disease with psoriasis, all appeared to respond about equally well.

"It is suggested that chloroquine comes closer to the ideal for long-term, safe, control of rheumatoid disease than any other agent now available." *Bagnall*[4]

"Out of the 36 rheumatoid arthritis cases we treated . . . favorable results were obtained in 32 cases. *Bruckner et al.*[5]

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Evidence continues to accumulate verifying the effectiveness of Gelatine in the treatment of brittle fingernails. Investigators report that the nails show objective evidence of improvement.[1,2,3,4] Furthermore, patients often volunteer that their nails "feel stronger," "look smoother," and "I can pick up things without them hurting."[1] Evidently the subjective sensations associated with improvement are nearly as important to some patients as the positive physical change in the nails' appearance.

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See the chart below for a summary of the effect of Knox Gelatine in brittle fingernails as observed in all published reports. Photographic evidence of improvement, much of it in color taken before and during treatment, is available for most of the patients.[1,2,3] Please note, however, that where Gelatine was used in the treatment of pathological conditions associated with brittle fingernails only in psoriasis did the data show definite improvement.[1,3,4]

Response to Gelatine in Brittle Fingernails

References	Dosage	Duration of treatment	No. patients w/ brittle nails	No. patients improved	No. patients w/ brittle nails and other pathology	No. patients improved
1. Rosenberg, S., Oster, K. A., Kallos, A. and Burroughs, W.: *A.M.A. Arch. Dermat* 76:330, (September) 1957	7 Gm./ day	3 months	50	43 (86%)	32[a]	9
2. Schwimmer, M. and Mulinos, M. G.: *Antibiot. Med. & Clin. Therapy* 4:403, (July) 1957	7.5 Gm./ day	11-16 weeks	18	15 (83%)		
3. Rosenberg, S. and Oster, K. A.: *Conn. State Med. J* 19:171, (March) 1955	7 to 21 Gm./day	15 weeks	36	26[b] (72%)		
4. Tyson, T. L.: *J. Invest. Dermat* 14:323, (May) 1950	7 Gm./day	13 weeks	12	10[c] (83%)		
Totals	7-21 Gm.	11-16 weeks	116	94 (81%)	32	9 (28%)

a. Gelatine improved psoriatic nails in 5 out of 12 cases. In onychomycosis and other pathological conditions of the nail it was of no appreciable help.

b. Of the failures, 2 had congenital disease of the nails, 3 were diabetics and 3 took the medication for less than one month.

c. One patient with psoriasis and arthritis and one patient with psoriasiform nail changes showed improvement in 2 and 3 months respectively.

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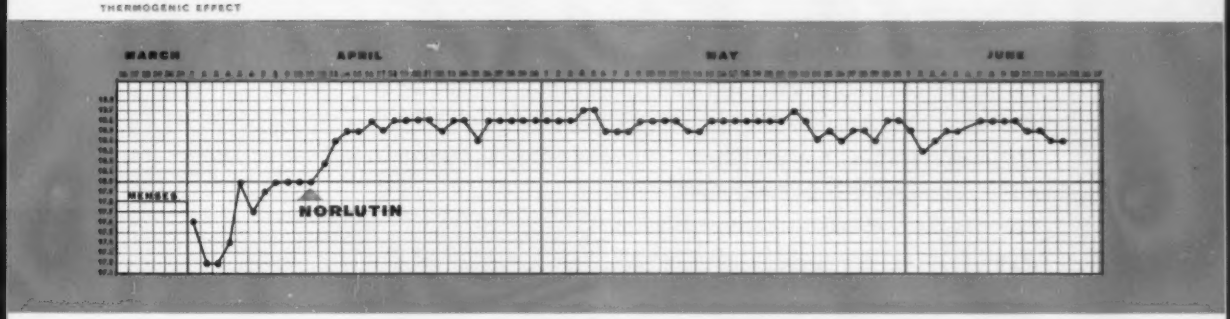

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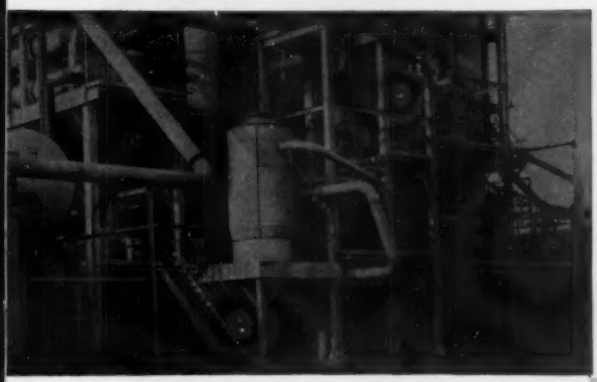

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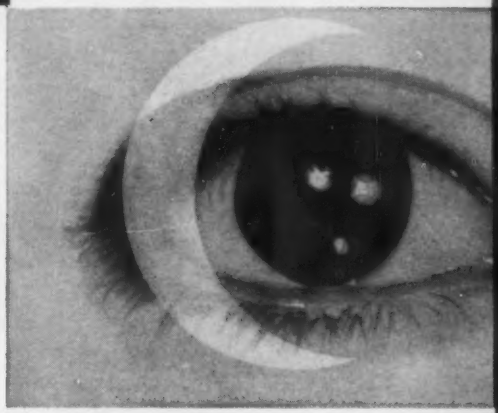

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Osteomalacia, with Emphasis on the More Resistant Forms

By Boy Frame, M.D., and
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MEDICAL thinking in respect to osteomalacia has undergone considerable revision since the early concept that dietary deficiency was primarily responsible for the skeletal disorder. In 1922, McCollum separated vitamin D from vitamin A, and it was not long before the former was generally recognized as the specific therapeutic agent. In recent years medical attention has turned increasingly to the more unusual and treatment-resistant forms of osteomalacia. It is now apparent that this skeletal defect can occur in persons of unimpaired gastrointestinal function who are receiving the normal requirements of vitamin D. Our interest in the problem has been heightened by studies we have conducted on a middle-aged woman with advanced and treatment-resistant osteomalacia. Observations on this patient are being reported in detail elsewhere. It is our present purpose to review, in general terms, the pertinent knowledge of the lesser known forms of osteomalacia.

Osteomalacia is the skeletal manifestation of a primary defect in calcium and phosphorus metabolism. As far as can be determined by histochemical studies, the normal ground substance in the bones of patients with osteomalacia defines the defect as being one of insufficiently calcified osteoid. In the blood of such patients, the well-known hypophosphatemia and the less consistent hypocalcemia appear to be primarily responsible for the mineral-deficient osteoid. Of more biochemical significance is the mathematical product of the calcium and phosphorus concentrations. In normal adults an ionic product of 30 to 40 can usually be determined. A sustained product less than this is likely to result in osteomalacia. Poorly-calcified bone understandably is more susceptible to the usual strains of weight-bearing and muscular activity. This results in an increased stimulation of osteoblasts, which, in turn, leads to the elevated alkaline phosphatase of serum. On the other hand, in advanced osteomalacia complicated by fractures, inactivity and lessened strains may result not only in lowered osteoblastic activity but in actual osteoporosis. In most cases of osteomalacia, one finds chemical evidence of secondary hyperparathyroidism. This compensation tends to restore the serum calcium towards normal, but it may further reduce the serum phosphorus level.

The severity of osteomalacia is quite variable. Skeletal symptoms are frequently vague and often overlooked unless a pathological fracture occurs. Muscular weakness and aching of the lower extremities may be experienced, particularly when walking, and patients with these symptoms may be mislabelled as psychoneurotics. In advanced cases the medical history may reveal a loss in height, and among the limited clinical findings a waddling gait and inconstant bone tenderness may be noted. Initially, one may find only a chemical osteomalacia with low concentrations of serum

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TABLE I. CAUSES OF OSTEOMALACIA

- A. Dietary Deficiencies of Calcium and Vitamin D
- B. Steatorrhea
  - 1. Pancreatic insufficiency
  - 2. Biliary tract obstruction
  - 3. Sprue
  - 4. Other diseases of the small intestines
- C. Renal Insufficiency
  - 1. Idiopathic hypercalciuria
  - 2. Renal tubular acidosis
  - 3. Fanconi syndrome
- D. Vitamin D-Resistant Osteomalacia
- E. In Association with Other Diseases
  - 1. Marble bone disease
  - 2. Healing osteitis fibrosa generalisata
  - 3. Hypoparathyroidism
  - 4. Craniostenosis
  - 5. Neurofibromatosis
  - 6. Wilson's disease
- F. Hypophosphatasia
- G. Of Unknown Etiology

calcium or phosphorus, associated with a normal, or in most cases, an elevated alkaline phosphatase. Later in the disease, peudofractures develop which usually are accompanied by generalized bony demineralization.

Table I lists etiologic possibilities in osteomalacia based on present knowledge. Dietary-deficient osteomalacia, or rickets, is a rarity in pediatric practice today and with proper prophylaxis should seldom be seen. The pathogenesis of the osteomalacia found in the various types of steatorrhea is fairly well understood. With defective absorption of fat, there is poor transport of calcium and vitamin D. This is the most frequent cause of osteomalacia in this country today.[1] The steatorrhea in such patients may be relatively mild and only careful balance studies will reveal an abnormal fat loss in the stool.

Osteomalacia Due To Defective Renal Mechanisms

The remaining types of osteomalacia are less well understood. Renewed interest in the problem is primarily the result of improved diagnostic methods and our expanding knowledge of renal tubular function. Since renal mechanisms play such an important role in the metabolism of calcium and phosphorus, it is not surprising that defects in renal function are sometimes accompanied by osteomalacia. Simply speaking, the bone softening is the result of hypercalciuria or hyperphosphaturia, severe enough to significantly lower the ionic product of calcium and phosphorus concentrations in blood. Loss of calcium to this extent is found in two conditions, idiopathic hypercalciuria and renal tubular acidosis. The hyperphosphaturia of patients with the Fanconi syndrome can be so excessive as to also result in osteoid depletion and osteomalacia.

Idiopathic hypercalciuria is thought to result from preceding pyelonephritis, which has led to selective damage to the renal tubules and excessive excretion of calcium.[2] In a large number of such cases, the invading organism has been identified as Staphylococcus albus. The hypercalciuria leads to hypocalcemia, which is followed by increased parathyroid function, hyperphosphaturia and hypophosphatemia. As might be expected, kidney stone formation is the most common complication of this condition, while actual osteomalacia occurs infrequently. Treatment presents a difficult problem in these patients since restriction of dietary calcium to lower urinary excretion may further the demineralization of the skeleton and osteomalacia. On the other hand, if extra calcium and vitamin D are given to prevent skeletal change, there will be a greater tendency towards formation of kidney stones.

Other types of renal tubular damage will result in a variety of metabolic defects. Renal tubular acidosis occurs when the kidney is unable to form an acid urine.[3] In this instance a defective ammonia synthesis by the kidney tubule results in an obligatory loss of cations in the urine. This sacrifice of base may involve calcium, potassium, sodium, or all three to varying degrees, and a systemic acidosis results with a persistently alkaline urine. The hypercalciuria leads to nephrocalcinosis, and the negative calcium balance, to osteomalacia. Fortunately, if the disorder is recognized, treatment is quite satisfactory and consists essentially of increasing the intake of base to meet the excessive loss.

Even more complicated renal tubular defects occur which underlie several clinical syndromes with osteomalacia. Dent[4] has made a significant contribution in his study and classification of these conditions. Most representative, perhaps, is the classical Fanconi syndrome.[5] Initially, it was felt that this condition occurred only in children under two or three years of age, but more recently a similar clinical and pathological picture has been described in adults.[6] The congenital defect in renal tubular function results in an excessive urinary loss of amino acids, glucose and phos-

phorus. A systemic acidosis occurs, but its pathogenesis is different from that seen in renal tubular acidosis. In the latter condition the acidosis is secondary to the inadequate ammonia synthesis by the renal tubule and the loss of fixed base. In the Fanconi syndrome, however, the acidosis results from an increased urinary excretion of base which is contingent on the excessive urinary organic acids, primarily amino acids. A combination of factors may contribute to the osteomalacia in the Fanconi syndrome. Not only is there a depletion of serum calcium and phosphorus due to renal wastage, but the systemic acidosis itself may accentuate the demineralization.

A clinical picture resembling the Fanconi syndrome recently has been described in a patient with multiple myeloma.[7] The acquired damage to the renal tubules was apparent in the glycosuria and excessive amino-aciduria which resulted in a systemic acidosis; eventually, osteomalacia with pseudofractures appeared.

Vitamin D-Resistant Osteomalacia

In general, vitamin D-resistant osteomalacia has become an unsatisfactory term since osteomalacia of diverse etiologies eventually may fall into this category. The osteomalacia in patients with renal tubular acidosis is resistant to vitamin D unless adequate alkali is given to correct the acidosis. Similarly, the osteomalacia of idiopathic steatorrhea is resistant to the vitamin unless the primary absorptive defect is improved by steroids and, perhaps, by a gluten-free diet. Nevertheless, there are cases in which the main defect seems to be a unique resistance to the action of vitamin D. One might compare this to the condition of pseudo-hypoparathyroidism in which there is found an inadequate response of the renal tubules to parathormone—an end organ defect.

Patients with vitamin D-resistant osteomalacia usually are diagnosed in early childhood, primarily because of dwarfism and bony deformities. However, adult forms have also been described. The changes in blood constituents and the x-ray findings are similar to those seen in osteomalacia resulting from dietary deficiencies. Increased fecal calcium and phosphorus without evidence of steatorrhea have been found in metabolic balance studies. In contrast to the usual case of vitamin D-deficient osteomalacia, the patient resistant to the vitamin has fecal calcium and phosphorus contents which are not decreased following the usual doses of 500 to 1,000 units given daily. It has been observed that some patients with vitamin D resistance require 500,000 to 1,000,000 units daily before fecal calcium is decreased and the osteomalacia is improved. The unresponsiveness of these patients is not due to faulty absorption, as the serum concentration of the vitamin has been found to be many times normal.[8]

Dent[4] is of the opinion that the osteomalacia resistant to vitamin D is due to an increase in the renal clearance of phosphate and that large doses of the vitamin correct this defect. This is in conflict with the view of Albright[3] that such large doses increase rather than decrease urinary phosphorus. The answer to this provocative problem awaits more definitive study on the action of vitamin D, especially in respect to delineating its specific effect on the kidney and bone. That the main action of the vitamin is to increase intestinal absorption of calcium and phosphorus seems well established.

Osteomalacia Associated With Other Diseases

Of theoretical interest, is the observation that osteomalacia may occur with certain other disease entities. The reasons for its development in most of these conditions has not been elucidated.

Marble bone disease or osteopetrosis is a rare condition of increased bone density throughout the skeleton. This is the apparent result of continuing osteoid calcification in bone where there is little or no resorption—a state of metabolic disequilibrium. It is postulated that if the calcium salts are not liberated from bone already formed, incomplete calcification of newly-formed osteoid tissue and osteomalacia will result.[9] This process will be accentuated if for any reason there is suboptimal absorption of calcium from the intestinal tract.

During the postoperative and healing stage of hyperparathyroidism in a patient with osteitis fibrosa generalisata, serum calcium and phosphorus concentration may fall to levels found in osteomalacia.[3] Under such circumstances bone biopsies have been found to show wide osteoid seams which are poorly calcified. This osteomalacia quite obviously is only temporary, and when healing is completed, bone of increased density results.

Albright has reported that under certain conditions osteomalacia may develop during the hypoparathyroid state.[21] His patient had hypocalcemia

with tetany and hyperphosphatemia following thyroidectomy. A diagnosis of hypoparathyroidism was apparent, but the findings of skeletal demineralization and increased alkaline phosphatase levels in serum suggested other possibilities. Bone biopsy revealed osteomalacia. Using a series of hypothetical ion products of serum calcium and phosphorus, Albright proposed that in hypoparathyroidism the product on occasion may remain below the critical point for osteoid calcification and that osteomalacia may result.

Of unknown significance is the association of osteomalacia with neurofibromatosis[10] and craniostenosis.[11] In Wilson's disease, one of the major metabolic defects is an increased renal clearance of amino acids and there may also be evidence of other renal tubular dysfunctions. Pertinent to the present discussion is the study of Cooper, in which there was evidence of impaired tubular resorption of phosphorus associated with biochemical and x-ray findings of osteomalacia.[12] It is possible that the tubular damage is in some way related to the increased concentrations of copper found in kidney tissue in the disease and that certain enzyme systems necessary for specific resorptive functions are inhibited by the excess copper.

Hypophosphatasia

Of unusual interest has been the recent description of a bone disease resembling osteomalacia in which a marked deficiency of alkaline phosphatase has been found in the cartilage, liver and serum.[13] Changes compatible with osteomalacia have been found in bone biopsies of patients with this condition, but, in contrast to the usual form of osteomalacia, the serum calcium and phosphorus may be elevated. The exact role of alkaline phosphatase in the calcification of bone is still to be determined. Gutman and Yu[14] are of the opinion that this enzyme makes available inorganic phosphorus from the phosphoric esters which arise from phosphorylative glycogenolysis occurring in endochondral calcification. If so, a deficiency of alkaline phosphatase would result in an insufficient concentration of phosphate ions for proper calcification of cartilage. In the presence of such an enzyme deficiency, an increase might be expected in serum and urine of certain phosphoric esters which are the substrates for alkaline phosphatase action. This has recently been verified with the demonstration of phosphoethanolamine, a major substrate of alkaline phosphatase, in the urine of patients with hypophosphatasia.[15] A relative, if not absolute, deficiency of alkaline phosphatase might underlie some of the more resistant types of osteomalacia, both in children and in adults.

Osteomalacia of Unknown Etiology

From time to time, patients with osteomalacia are reported whose metabolic defects differ from the usual form of vitamin D-resistant osteomalacia. Inability to retain either absorbed or infused calcium was the main defect in a patient of a recent report.[16] In addition, an increased renal clearance of phosphorus was demonstrated. Vitamin D in amounts up to 1,000,000 units daily failed to improve the osteomalacia, and it was postulated that a defect in the bone itself in some way prevented normal mineralization.

The account of another patient with an obscure form of osteomalacia has been published by Henneman,[17] and follow-up reports on this patient subsequently have been received from the investigator.[18] A significant clinical and biochemical improvement followed partial parathyroidectomy and the daily addition to her diet of 3 grams of inorganic phosphorus. These measures partially corrected the chronically low serum phosphorus, and thus favored the rate of osteoid calcification.

The patient whom we have under study presents a clinical disorder similar in many respects to those reported by Kyle[16] and Henneman.[17] The pertinent features are multiple true and Milkman's fractures, loss of height, hypophosphatemia, reduced tubular resorption of phosphorus with little evidence of other renal tubular dysfunction, and a failure to respond to intensive vitamin D and calcium treatment. As with the patient reported by Henneman,[18] clinical improvement followed added oral phosphorus. Several such patients are now under detailed observation both in England and the United States, and the results of these studies are awaited with anticipation.

General Comments

This review of osteomalacia emphasizes the limitations of knowledge in respect to calcium and phosphorus metabolism. The departures from normal of serum calcium and phosphorus levels in various disease states are well known, but the mechanisms of these alterations are not always clear. In consideration of such changes, the

absorption of calcium and phosphorus through the intestinal wall, the renal control of these ions, and, in the intact subject, the interactions of vitamin D and parathormone have to be considered. There is still controversy about the action of the latter, as both a phosphorus-diuretic effect and a calcium-mobilizing action on the bones have been described. There is no question that vitamin D increases the intestinal absorption of calcium and phosphorus, but its action on the kidney and on bone itself is less certain. Complicating the attempts to define the biochemical pathways of vitamin D action is the tendency of the sterol to elevate serum calcium in the intact subject. This response automatically inhibits parathyroid function and this interaction becomes the apparent effect of vitamin D itself. It is obvious, then, that the pharmacologic properties of vitamin D are best studied on parathyroid-deprived animals or man.

In the several reported studies of the more resistant forms of osteomalacia the low serum phosphorus has been the cause of much speculation. Albright[3] has suggested that a secondary hyperparathyroidism is responsible. Dent[4] would rather reject this thesis, and proposes the idea that the low serum phosphorus is brought about by a primary increase in the renal clearance of phosphorus. It now appears that a precise and universally acceptable explanation for the low serum inorganic phosphorus is an important key to the successful management of the patient with resistant osteomalacia. Even after large amounts of both vitamin D, in the order of 1,000,000 units daily, and added phosphate salts, the fasting level of serum inorganic phosphorus may remain abnormally low.[16] After such therapy we have observed a marked increase in urinary phosphorus, indicating no significant defect in phosphorus absorption. For some reason, the serum phosphorus is either unable to return to normal values or it approaches these only briefly after phosphate ingestion. It is possible but unlikely that certain tissues, such as liver and muscle, have an increased avidity for inorganic phosphorus, which action keeps the serum value abnormally low. Studies with radioactive phosphorus in these patients might be helpful in tracing the metabolic pathways of the absorbed phosphorus. We have considered as also possible a defect in the serum phospholipids such that this fraction is expanded at the expense of the serum inorganic phosphorus. Indeed, an elevated phospholipid value has been found in the patient now under our study, but the significance of this is not yet known.

Since large doses of vitamin D and added supplements of oral phosphorus given to patients with resistant osteomalacia have not raised the fasting level of serum inorganic phosphorus, other approaches should be considered. One of the most certain ways to achieve hyperphosphatemia is to remove the parathyroids. Loss of the presumably hyperplastic glands would be a relatively small price to pay for potential improvement in a patient immobilized with resistant osteomalacia. It is unlikely that the low serum calcium following such surgery would be more difficult to control than the preoperative hypophosphatemia. It is known that patients with hypoparathyroidism may have dense bones, a desirable development if this could be induced in a patient with resistant osteomalacia. As mentioned previously, Henneman's patient was noted to have an increased serum phosphorus as well as clinical improvement after partial parathyroidectomy and added dietary phosphorus.[18]

Another approach to the treatment of these patients is the use of sterol preparations other than vitamin D-2, which in the past has been used almost exclusively in the therapy of osteomalacia. In general, the few investigators who have explored these avenues believed there was no significant difference between the actions of vitamin D-2 and vitamin D-3. However, recent work indicates that patients inadvertently deprived of parathyroids during thyroid surgery and resistant to vitamin D-2, will show a significant improvement after vitamin D-3.[19] The comparative properties of the several vitamin D preparations probably should be determined in a variety of metabolic bone diseases, including resistant osteomalacia.

Dent, in a recent publication, has again emphasized that osteomalacia in its many forms is sometimes genetically determined and, with this knowledge, more such patients should be uncovered for critical study.[20]

Summary

A classification of osteomalacia has been given which takes into consideration recent additions to our knowledge of the disease. Emphasis has been placed on the more resistant forms. We have

(Continued on Page 1558)

Economic Aspects of Fungus "Contaminants"

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THE MEDICAL profession has become fairly well acqainted with the pathogenic fungi. Terms such as actinomycosis, blastomycosis, coccidiomycosis, geotrichosis, histoplasmosis, and torulosis are well known. However, since the antibiotics have had their heyday and bacteriology and mycology are being used for diagnosis once again, doctors are receiving reports listing the names of fungi with which they are not familiar. These fungi are usually designated as "saprophytes" or "contaminants." Although the majority do not produce any disease in man, they are of great economic interest and importance. Their effects upon man are widespread and have been so for many centuries.

There are approximately 50,000 known species of fungi[1] and many more have yet to be classified. They range in size from the large toadstools and puff balls to the microscopic forms. All fungi, regardless of size, are entirely lacking in chlorophyll and must maintain life by one of two methods. The saprophytes, or decay type of fungi, grow on dead plant or animal material. The parasites require living plant or animal material for growth and produce disease.

The effect of fungi was mentioned in both unfavorable and favorable commentaries prior to the birth of Christ. In 100 A.D. Pliny claimed that the greatest pest of crops was wheat rust.[1] At the same time, Pliny, Cicero, Porphyrius, and Plutarch described truffles as one of nature's most wonderful creations[2]; they believed that truffles stimulated love.

The fungus responsible for wheat rust continued its destruction of crops from Pliny's age down through the centuries. In the late 1300's when John of Gaunt owned half of Britain,[3] the wheat rust was causing enough damage to be mentioned in the writings of Chaucer. The United States suffered the loss of 300 million bushels of wheat from the same fungus in 1916. Man now combats the wheat rust by raising fungus-resistant varieties of wheat.

In 1845 the August 23rd and September 13 issues of the Gardners' Chronicle and Agricultural Gazette of England mentioned the Irish potato blight occurring in both Europe and Ireland.[1] The fungus destroyed the entire potato crop within seven days. At that time, 10,000 lives were lost and millions suffered from misery and privation. Between 1845 and 1851 almost a million people died in this famine in Ireland alone, where potatoes constituted one of the staples. As a direct result of the famine, there was an immigration of one to two million Irish to the United States.

A similar fungus affected the grape vines of France in 1882 and threatened to wipe out the entire grape crop. At that time a learned mycologist, Pierre Millardet, worked out the now famous Bordeaux mixture of copper sulfate and lime, which is still used by the grape industry.[1]

A number of fungi cause the decay of leaves, branches, and tree trunks.[4] Unfortunately the same fungi fail to differentiate between dead timber and railroad ties, telephone poles and timbers supporting houses. The cost of such damage has run into billions of dollars. Wood rot was the biggest problems with which the British navy had to contend from the time of Henry VIII to 1860 when they switched to iron-clad ships.[1] About the time of the American Revolution, wood rot caused more destruction to British ships than the combined attacks of all other navies.

Many ancient and valuable documents have been lost to the world through their destruction by fungi. Fortunately, the old Spaniards were able to prevent the fungi from attacking many of their old records, making available to us some of our most fascinating stories of the sea, the Caribbean area and pirate days. By working directly from Columbus' old logs, a Dutch sea captain was able to establish that Columbus made his original

landing on Caicos Island rather than Watling Island, as has been assumed for many years due to calculations made from faulty translations of the logs.[5] An event of less historical importance, but one which affords some satirical amusement, is preserved in the Jamaica museum.[6] When an American privateer was accused of smuggling by the British in the War of 1812, he threw his incriminating log book overboard. The log was swallowed by a shark, which was caught by the crew of the British man-of-war bringing the smuggling charges against the privateer. The old document states that he was convicted on the evidence found within the shark.

For centuries certain types of fungi have been known to produce psychotic aberrations. The devil plant of Mexico is a fungus which causes visual hallucinations in the form of objects appearing in various colors. A closely related fungus which produced "berserk men" has been found by European scholars.[7] The word "berzerk" means bear skin and and is derived from early Norsemen who ate the fungus and became markedly psychotic.[8] These tribesmen knew the effects of the fungus and staged orgies, during which they ate the fungus or drank the urine of those who had eaten the fungus, realizing that the alkaloid was excreted in the urine in an unadulterated state. When under the influence of this fungus, the men fought with the fury of beasts, had twice the strength of normal men, and apparently felt no pain. They killed without regard to identity, and as often as not they slaughtered each other. These effects lasted for hours; but when they wore off, the men were left in a weakened condition and they were often destroyed by their enemies.

During World War II, 50 per cent of the articles sent to the South Pacific or other tropical areas were rendered unusable by fungi. The problem was serious enough to warrant the formation of the Tropical Deterioration Laboratory of the Quartermaster Corps.[9] Data was collected and studies were made on the effects of fungi on such varied materials as cloth, wood, paper, bakelite, waterproofing, roofing tar, paint, insulation on wire, photographic emulsion, glass, and optical equipment.

In the Middle Ages ergotism was a disease which produced gangrene, abortion and death. Today the active principle in ergot which once caused disability and death is used to produce a drug valuable in obstetrics.[1]

The story of the antibiotics is well known.[10] However, it is less commonly known that weight for weight, the value of many of the commonly used antibiotics exceeds that of gold. One gram (four 250 mg. capsules) costs approximately $2.00 or about $60.00 per ounce. The current market price of gold is $35.00 per ounce.

In addition to their value in the production of antibiotics, fungi can be used to produce vitamins, fat, and protein supplements.[11] In the future they may become an important factor in food production, especially in such over-populated countries as China, Japan, and India, where diet is limited and low in protein. Although this is a relatively new concept as far as homo sapiens is concerned, many of the highly developed social insects, such as ants and termites, have been cultivating fungi for use as food for untold centuries.[4]

A number of economically important fungi are listed alphabetically, with no relation to their classification. Information on their classification may be found in a number of books: Dodge's "Medical Mycology"[12]; Bessey's "Morphology and Taxonomy of Fungi"[13]; Beneke's "Medical Mycology: Laboratory Manual"[14]; Conant's "Manual of Clinical Mycology"[15]; Barnett's "Imperfect Fungi."[16] Many of the fungi listed are ones commonly reported by clinical laboratories and are primarily plant pathogens which are capable of producing allergies or similar diseases in man.[17]

Actinomyces contains numerous organisms, of which thirty-four species have been classified. The organisms may be called Actinomyces or Nocardia and are pathogenic for plants, animals and man. It is responsible for potato scab, which is world wide in distribution and is one of the most important and least satisfactorily controlled potato diseases.[18,19]

Actinomyces bovis is pathogenic for both man and animals;[15] it produces draining sinuses of the jaw, chest or abdomen. The organisms may also attack the bone, lung, intestine, and lymphoid tissue.

Alternaria is a plant pathogen primarily causing leaf spot disease in potatoes and tomatoes. Brown to black leathery spots appear on the leaves of the affected plants. Tomato fruits are affected in the green or ripe stage. The fungus also attacks violets, muskmelon, oranges, carrots, carnations, apples, grapes, figs and olives. Since Alternaria spores have a very slow rate of fall, they are widely distributed in nature.[18,19]

In man Alternaria produces respiratory allergy and is responsible for asthma.

Alternaria has the singular distinction of being the first fungus recovered from solutions of radioactive isotopes.[20] It was recovered from a solution which could not be standardized and was found to be actually taking up the radioactivity. Alternaria is responsible also for the sterilization of isotope solutions. Until it was found as a contaminant, isotopes were considered to be self-sterilizing.

Aspergillus is a large group which can produce disease in both plants and man and which is of commercial importance. It is often responsible for the spoilage of stored seeds and attacks on onions and figs.[18,19] In man the organisms cause an allergy or pneumonia. In addition, they can attack the eye or ear.

Commercially, Aspergilli are used in the production of gallic acid, citric acid, gluconic acid, oxalic acid and itaconic acid.[21]

Since before 1800 B.C. Aspergilli have been used to produce sugars from starches, cereals, grains, potatoes, etc.[4] The Japanese use it to make saki, which is a rice wine made with the aid of the fungus. The fungus converts the rice into sugars, which are then fermented with yeast. The manufacture of this wine has been a household art in Japan for centuries. About 200 years before the time of Pasteur, they were heating the finished product to prevent spoilage—the Japanese pasteurized their wine two centuries before Pasteur developed the process to preserve French wines from spoilage.

Captured allied troops in World War II took advantage of their knowledge of the Aspergilli by using it to convert part of their rice ration into sugar, which they fermented with yeast.[1,26] In this manner, they obtained enough vitamin B to prevent beriberi.

Cephalosporium, found in soils throughout the world, produces black bundle disease in corn.[18,19] As far as is known, it has no effect on animals or man. Cephalosporium may be mistaken microscopically for Sporotrichum, which is pathogenic for both animals and man.

Fusarium has 1500 species, which are world wide in their distribution. In a large variety of plants it produces vascular wilts, the economic implications of which are tremendous. Some of the plants it attacks are flax, cotton, watermelons, cabbage, bananas, celery, tea, peanuts, muskmelons, asters, beans, stock, and cactus.[18,19]

In man Fusarium causes a respiratory allergy.

Fusarium was the first fungus to record itself by inherent radioactivity from metabolized I.[131,22]

Gliocladium is a common laboratory contaminant which microscopically resembles Penicillium.[18,19] It is a saprophyte, as well as a mild plant parasite. During World War II, Gliocladium caused fabric decay in military equipment.[9] It has no effect on any animals.

Gliocladium is closely related to the molds used in the production of steroids.[27]

Helminthosporium is a plant pathogen consisting of approximately 250 species. It attacks tree seedlings and basic crops, such as barley, oats, and onions.[18,19] In man the organism affects the lung and produces an allergy.

Helminthosporium is an example of one fungus being able to control another. There is a fungus, Chaetonia, which is common to the soil and which lives largely on decaying plant material, although it often invades the cellulose fibers of fabrics. Recently a strain which inhibited the growth of Helminthosporium was found in seeds. When the soil around oak seedlings was inoculated with Helminthosporium in an experiment, most of the seedlings were killed; those which survived were diseased. However, when the soil was inoculated with both Helminthosporium and Chaetonia, the Helminthosporium did no harm to the seedlings. Apparently the Chaetonia did not invade the other fungus, but produced a chemical which diffused around it to either kill the organism or to inhibit its growth.[4]

Hormodendrum produces spots on barley stems and leaves, often reducing the yield.[18,19] It is common in both the soil and the air. In man and animals it causes allergy and attacks the lung. H. pedrosoi and H. compactum are responsible for Madura foot.[15]

Monilia is a genus comprised of forty species, some of which are pathogenic for plants. It attacks the epidermoid layer of peaches, cherries, plums and stone fruit to produce mummified fruits.[18,19] The only species pathogenic for man is Monilia (Candida) albicans. It can affect the skin, mucous membranes, intestinal tract or respiratory tract.

Mucor consists mainly of saprophytes, but there are a few species which produce decay in ripe fruit, tubers, pumpkins, and okra.[18,19] It can also cause blights in blossoms.

In man, Mucor causes allergy and has been isolated from the lung, the respiratory tract, the

brain, and diabetic limbs with vascular thrombosis.[23] The organism can be seen in tissue.

Mucor is host to a parasitic fungus which was considered rare until 1930. Since then it has been found as a parasite on Phycomycetes isolated from animal intestines.[5] This would appear to be the mycological version of the old biological jingle that big fleas have smaller fleas, smaller fleas have lesser fleas, etc., upon their backs to bite them.

Nigrospora is one of the mildews, whose jet black spores produce stains on paper and cloth. It also causes a disease in corn.[18,19] It has no effect on man or animals.

Oospora consists of forty-four species and attacks hops, clover, cucumbers, chrysanthemums, tobacco and oaks.[18,19] When present in cottage cheese, it affects the flavor.[21] Oospora has been isolated from skin lesions in crocodiles. The pathogenic form in man, Geotrichum, affects the respiratory tracts and the gastro-intestinal tract.

Paecilomyces is a saprophyte having conidiophores which resemble those of Penicillium.[18,19] Dodge reports using it to experimentally produce a granuloma or tumor.[12]

Penicillium has many species, some of which can affect both plants and man. It produces fruit rot in oranges and other citrus fruits.[18,19] In man it can attack the lungs, bladder, kidneys, ear and nails.

Fleming used Penicillium notatum to produce penicillin, the first antibiotic. In 1954, the production of penicillin was 860,000 pounds, valued at $63,000,000.[21]

The green color in roquefort cheese is due to Penicillium, and species of Penicillium are used in the manufacture of other cheeses.

Phialophora is a saprophyte which attacks the skin in man to produce chromomycosis.

Phoma consists of 1600 species. It was first reported in Germany in 1791 and in the United States in 1910. It is especially destructive to cabbage, but it may also produce wilt in broccoli, Brussels sprouts, turnips, beets, pears, tomatoes, apples, hops, fir trees and grapes.[18,19] In man, it causes a respiratory allergy.

Rhizopus, best known as the common bread mold, is far more important as a plant pathogen. It enters plants through wounds and causes the protoplasm in adjacent cells to shrink, producing soft rot in sweet potatoes, Irish potatoes, beans, apples, pears, tomatoes, peaches, plums, raspberries, quince, strawberries and currants.[18,19]

In man, Rhizopus attacks the lungs and produces an allergy.[23]

Species of this fungus are being used commercially to produce tons of the steroid intermediates, which eventually are marketed as cortisone and allied drugs.[27]

Rhodotorula, which is similar to Candida except for its red pigment, produces pineapple and sugar cane rot by oxidation of sugars.[18,19] In the laboratory Rhodotorula may be confused by its gross appearance on culture media with a chromogenic bacterium, Serratia marcescens, which was associated with miracles in the Middle Ages.[24,25] It was found on bread in areas of France and was believed to be Christ's blood.

Scopulariopsis is a saprophyte which thrives in high nitrogenous dead material, such as cured meat, bone, wool, leather, and ripening cheese.[18,19] In man, it attacks the skin under the nails to produce onychomycosis. Both spores and hyphae are seen in the tissue.

Scopulariopsis is peculiar in that it attacks material containing arsenic.[21] Arsenic is often used in paint to produce a green color, particularly in the war, moist climates where fungi are abundant. As the fungus attacks the paint, the arsenic is released as a gas which produces symptoms of arsenic intoxication when inhaled.

Streptomyces is a plant pathogen which causes potato scab in Irish potatoes and soil rot in sweet potatoes.[18,19]

This group has produced many of the antibiotics, some of which are chloramphenicol, chlortetracycline, oxytetracycline, and erythromycin. The total production of broad spectrum antibiotics in 1955 was 450,000 pounds and its wholesale value was $195,000,000. These figures leave no doubt as to the commercial importance of this laboratory contaminant.

Syncephalastrum is parasitic on other molds, as well as being saprophytic on plant and animal remains.[18,19] It has no known effect on living man or animals.

Trichoderma produces storage rot in sweet potatoes. It is common in any decaying material and is used as an antagonist to control some fungi which are plant pathogens. It has no effect on man or animals.[18,19]

Verticillium produces a vascular disease called the "wilt" in okra, potatoes, egg plant, cotton, black raspberries, snap dragons, and dahlias.[18,19] It has no known effect on man.

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OSTEOMALACIA

(Continued from Page 1553)

alluded to some of the underlying mechanisms and have pointed out the gaps in our understanding of pathogenesis. The significance of the low serum inorganic phosphorus in treatment-resistant osteomalacia has been discussed, and possible new approaches to treatment have been suggested.

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A Comparative Study of the Clinical Effectiveness of Dicumarol and Hedulin

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DICUMAROL® is an anticoagulant of proven merit, high tolerance, and relative safety.[1] It has two major faults: delay in onset of activity, and persistence of effect after termination of therapy. Hedulin® is a newer anticoagulant, chemically related to the indandione group, reported to be as effective as Dicumarol and superior to it with respect to these two drawbacks.[2,3] The following report describes a comparative study of the clinical effectiveness of these two drugs in a large general hospital.

Material and Methods

A section of the medical service consisting of eight six-bed wards was used for this study, and all patients requiring anticoagulant therapy were included.[2-4] Patients in the even-numbered wards received Hedulin, those in the odd-numbered wards, Dicumarol. Pertinent clinical data are summarized in Table I.

Dosage of medication was controlled by daily prothrombin concentration determinations according to the Quick one-stage method. These determinations were reported as per cent of normal, and those patients with prothrombin concentrations between 10 per cent and 30 per cent of normal were considered under effective control.[5] The same physician was responsible for ordering medication throughout the course of any one case. When possible, prothrombin determinations were obtained for several days after termination of therapy to determine the rate at which the prothrombin concentration returned to normal. Prothrombin concentrations of 70 per cent or higher were considered to be within the normal range. Each patient included was studied with reference to the following points: (a) Total number of days during which the patient was on anticoagulant therapy; (b) days required to establish adequate anticoagulant effect; (c) days under effective therapy; (d) days out of control after effective levels had been reached, that is, the number of days when the prothrombin concentration was higher than 30 per cent; (e) days to return to normal prothrombin concentrations after termination of therapy; and (f) percentage of total time, after effective control, that the prothrombin determinations were above or below effective levels. This figure was derived from the following formula:

$$\frac{\text{Days out of Control}}{\text{Total Days minus Days to Control}} \times 100$$

The results of our study are summarized in Table II and indicate that in our hands Hedulin was almost twice as effective as Dicumarol in maintaining an effective reduction in prothrombin concentration: with Dicumarol, the patient's prothrombin concentration was not at therapeutic levels 25.4 per cent of the time, while with Hedulin, the period of ineffective therapy was 13.9 per cent. Hedulin also produced a more rapid reduction in prothrombin concentration when therapy was initiated, and permitted a more rapid return to normal when therapy was discontinued.

Failure to maintain adequate reduction in prothrombin concentration on an average of one out of every four days of therapy may seem high, and it impressed us as being unduly so. However, there are certain difficulties inherent in translating carefully controlled studies in research hospitals, where standardized procedures are the rule, into techniques applicable in large busy general hospitals lacking such rigid standardization. With this in mind, we believe that the superiority of Hedulin demonstrated in our study is of great practical importance. Twelve of the eighty-eight patients receiving Hedulin were under effective control during their entire course of therapy. Each of the Dicumarol-treated patients was out of effective control on at least one day. Furthermore, once effective levels had been reached, the dosage schedule of Hedulin was surprisingly constant, often

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TABLE I. CLINICAL DATA

	Dicumarol	Hedulin
Number of Patients:	54	108
Male	40	66
Female	14	42
Age:		
Range	40-86	40-82
Average	57	66
Indications for Treatment:		
Thrombophlebitis	9	3
Myocardial Infarction	44	101
Thrombosis (cerebral or peripheral arteries.)	1	4

TABLE II. RESULTS OF CLINICAL STUDY WITH DICUMAROL AND HEDULIN

	Dicumarol	Hedulin
Total number of days on anticoagulants	1,420	1,366
Days required to achieve effective suppression of Prothrombin concentration (average)	4	3
Days required to regain normal prothrombin concentration levels after termination of therapy (average)	3	2
Percentage of time, after achieving effective suppression of prothrombin concentration that such suppression was not maintained	25.4%	13.9%

for a week or more. The present practice of obtaining daily prothrombin concentration determinations is a reflection of the difficulty encountered in the administration of Dicumarol. Once effective control has been achieved with Hedulin, subsequent dosage is quite predictable, and prothrombin determinations at intervals of three or four days would be adequate in most cases. Because of this constancy of dosage, we feel that Hedulin will lend itself well to the manegement of ambulatory patients requiring anticoagulant therapy. We are now engaged in following a group of such patients using weekly prothrombin concentration determination. Because of the three-to-four-day lag in achieving effective depression of prothrombin concentrations using either drug, we feel that the routine initial use of Heparin is advisable in patients who require anticoagulant therapy.[6]

We encountered no serious toxic or hemorrhagic complications with either drug. A red discoloration of the urine may be produced by Hedulin and should not be confused with hematuria.

Summary

1. 162 patients, representing 2,786 anticoagulant days were treated with Dicumarol or Hedulin.

2. Patients receiving Dicumarol were found to require an average of four days to achieve effective reduction of prothrombin concentrations. Subsequent control was difficult, and the prothrombin concentrations were out of the effective range 25.4 per cent of the time. Recovery of prothrombin concentration to normal occurred in an average of four days following termination of therapy.

3. Patients receiving Hedulin were found to require an average of three days to achieve effective reduction of prothrombin concentrations. Subsequent control was easier than with Dicumarol, and the prothrombin concentrations of these patients were out of effective range only 13.4 per cent of the time. Recovery of the prothrombin concentration to normal occurred within three days following termination of therapy.

4. In our hands, Hedulin was superior to Dicumarol with regard to time of activity, ease of maintaining effective prothrombin concentration, and rapidity of restoration of prothrombin concentration following treatment. It appears to be a more practical anticoagulant for use in ambulant as well as hospitalized patients.

Acknowledgment

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Non-cyclic bleeding from any body orifice, an irritative cough, a minor change in bowel habit, or vague indigestion in middle life should always call for careful questioning and investigation.

The inclusion of a rectal, vaginal, and breast examination in all persons over thirty-five years of age is undoubtedly more important than looking in their mouths and taking their blood pressure.

Myocardial Infarction in an Industrial City

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A REVIEW of the patient charts with the diagnosis of acute myocardial infarction was made for the year 1954 in the three medical hospitals (Hurley, St. Joseph, and McLaren) that serve Flint, Michigan, a busy industrial city of 250,000 population. Only those patients were included who had autopsy confirmation or unequivocal electrocardiographic changes and who had the onset of symptoms referrable to the infarction within two weeks prior to admission. No set plan of treatment was followed. Each patient was treated according to his individual needs by his private physician. Using the above criteria in selecting cases, a total of 254 cases of infarction was compiled and studied.

Incidence

It has been the impression of local physicians that the incidence of infarction is greater in Flint than in other communities of comparable size. This observation has been attributed to the employment of a large share of the local laboring force by the automotive industry where the competitive demands on executive and laborer alike are great. The Flint Department of Health listed 410 cases for the year 1954, but it is impossible to determine with accuracy the exact number of infarctions that do occur in a city. Our total of 254 cases did not include patients treated in osteopathic hospitals or at home, or patients dead on arrival at hospitals without autopsy proof of cause of death. In Flint, most recognized cases are hospitalized (the prevalent use of hospitalization insurance is partially responsible for this). The ratio of one infarction to 194 hospital admissions in one of the hospitals (Hurley) compares favorably with a similar ratio of 1:205 found in Dallas, Texas.[1] Variable factors, including the local professional philosophy concerning hospital versus home care, availability of hospital facilities, and patient ability to pay for hospital care, would invalidate comparisons of the incidence in one community with that in another.

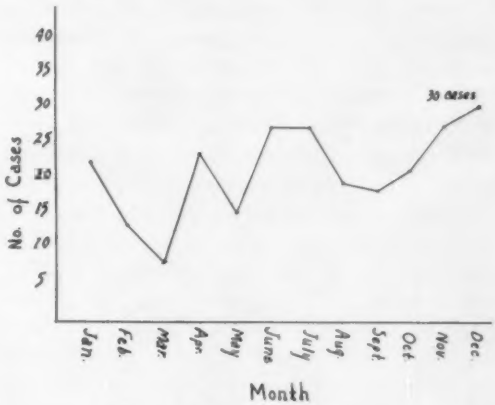

Fig. 1. Seasonal distribution.

Race

Negroes constitute 6 to 8 per cent of the Flint census and approximately 20 per cent of patients at Hurley Hospital. Despite the comparable admission rate for Negroes, only four, or 1.6 per cent, of the 254 cases were Negro patients. This finding would support the impression that this disease is less common in the Negro race.[2,5] The reason for this apparent difference in incidence of myocardial infarction is as yet unexplained.

Sex

There were 196 men and fifty-eight women in our study, for a ratio of 3.4:1. Various authors report ratios from 1:1 to 8:1. The Henry Ford Hospital study on 920 patients showed a ratio of 4.4:1.[4] More recently, Lee and Thomas[5] report an increasing frequency in elderly women, with a reduction of the ratio to 1.2:1.

Seasonal Incidence

Some writers claim a higher incidence in the winter months, but most feel that there is a fairly even distribution throughout the year.[10,3,6] Teng

From the Department of Internal Medicine, Hurley Hospital, Flint, Michigan. Dr. Bareis and Dr. Schroeder are residents in Internal Medicine; Dr. Drewyer is Head, Department of Internal Medicine.

TABLE I. OCCUPATION

Occupation	Number of Patients	Per Cent of Total
Skilled and unskilled workers	95	50%
Supervisory or executive	24	13%
Retired	30	16%
Housewives	30	16%
Unemployed	9	5%

TABLE II. AGE DISTRIBUTION

	Total	Male		Female	
		Number	Per Cent	Number	Per Cent
Patients under age 50	49	48	98	1	2
Patients over age 50	205	148	71	57	29

TABLE III. LOCATION OF INFARCTION

	Number	Per Cent	Per Cent Mortality
Anterior	143	56	34
Posterior	111	44	21

and Heyer[1] in Dallas, Texas, report a higher incidence in the summer months, while Smith et al[4] in Detroit found an even distribution with a slight increase in November. June, July, November and December were the peak months in our study (Fig. 1). It can only be a matter of speculation as to the role that the extremes and sudden changes in weather and concomitant activity (such as shoveling snow) assume in producing these peaks.

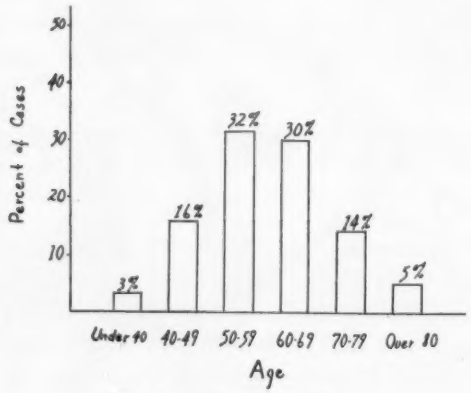

Fig. 2. Age distribution.

Occupation

Occupational data was available on 188 patients.

There is inconclusive evidence that an etiologic relationship between type of occupation and occurrence of coronary thrombosis exists. Yater[2] found that individuals engaged in less physically difficult occupations than control groups had a higher prevalence of infarction. Of those employed in the city's industry (119 patients), twenty-four, or 20 per cent, were in the supervisory or executive category. This percentage parallels the actual prevalence of this group in the city's industry, about 18 per cent. There was no occupational preponderance in our series of cases.

Age Distribution

Some authors have found infarction to be most common in the fifth decade;[7,8] McDonald and others have found the highest peak to be in the sixth decade.[9,10] Sixty-two per cent of our patients were between the ages of fifty and seventy years (Fig. 2). Three per cent were less than forty years of age, a finding agreeing with that of Friedburg.[7] The ratio of males to females tended to equalize in the older age groups. The only premenopausal patient among the fifty-eight females was a forty-two-year-old woman with diabetes. It is a well-recognized clinical finding that myocardial infarction rarely is found in premenopausal women in the absence of hypertension or diabetes.

Location of Infarction

Most writers seem to agree that an anterior infarction is slightly more common than a posterior; however, there is no agreement concerning the effect of the location of the infarction on the mortality rate.[4,9,14] Most feel that there is no difference, but a few feel that an anterior infarct has a poorer prognosis. Mintz and Katz[10] find the posterior infarct to have the least favorable outlook. Our study indicated a slight prevalence of the anterior location with a somewhat increased mortality rate.

Leukocyte Count

Mortality rates have been said to rise in proportion to the elevation in the white cell count.[4,15] Twenty-four of the sixty-five patients with a leukocyte count over 15,000 expired, or 37 per cent compared with the over-all mortality of 26 per cent. On the other hand, several patients had counts of less than 10,000. Generally we feel the leukocyte count is of no prognostic value unless persistently elevated during the hospital course.

Erythrocyte sedimentation rates, C-reactive pro-

TABLE IV. LEUKOCYTE COUNT

Leukocyte Count	Number of Patients	Per Cent of Total
Of the 230 counts recorded on admission:		
Less than 10,000	68	30%
10,000-15,000	97	42%
Greater than 15,000	65	28%
Of the 45 counts recorded among the 66 deaths:		
Less than 15,000	21	47%
More than 15,000	24	53%

tein, and cholesterol values were obtained too infrequently to be statistically informative.

Associated Disease

Angina Pectoris.—Of the 254 reported cases, 135, or 53 per cent, gave a history of angina pectoris. Not included in this total were cases where anginal pain heralded the onset of the infarction, i.e., only past history of angina was included. This percentage did not vary appreciably with age or sex and did not have any effect on prognosis. Smith and his group[4] reported an incidence of approximately 50 per cent, whereas Mintz and Katz[10] found a higher incidence of 72 per cent. Neither author discovered a sex variation or effect on mortality.

Hypertension.—Hypertension is very frequently associated with coronary occlusion, varying incidences of 30 to 80 per cent having been reported. Mintz and Katz reported 36 per cent;[10] Master found 62.4 per cent.[8] We found sixty-four cases, or 25 per cent, where hypertension was definitely associated. Not included were patients who gave an unreliable history or whose blood pressure elevation was borderline or elevated on only one occasion. Therefore, our figure of 25 per cent is undoubtedly lower than the actual incidence in this group of patients. Hypertension was more prevalent in women (twenty-nine cases, or 50 per cent) than in men (thirty-five cases, or 18 per cent). This finding is in agreement with previous reports.[8,10] The mortality rate among these sixty-four patients was twenty-one, or 33 per cent, as compared to the over-all mortality of 26 per cent. Most authorities deny an increased death rate in this group.

Diabetes Mellitus.—Twenty-five cases, or 10 per cent, had diabetes mellitus, which agrees with the 10 to 25 per cent found in the literature.[4,8,10] In view of the degenerative vascular changes associated with diabetes, it is not surprising that this percentage is far above the estimated 1.2 per cent of the total population that have diabetes or the 4 per cent morbidity in the infarction age range. Some 10 to 30 per cent of diabetic patients have findings of acute coronary occlusion at autopsy.[11] Ten, or 40 per cent, of our patients with diabetes died. Most, but not all, writers feel the mortality with myocardial infarction to be greater in the diabetic.

Obesity.—Of a total of 171 patients whose height and weight were available, seventy-five, or 44 per cent, were overweight, while ninety-six, or 56 per cent, were average or underweight. Using the Metropolitan Life Insurance tables, we classified as obese all those who weighed ten pounds or more than the maximum weight listed for a large-framed person of any certain height. Since it has been estimated that 20 per cent of adults in the United States are overweight, our incidence of 44 per cent would seem to be significant. This finding cannot be attributed to the increased number of people in the older age group in our series, since thirty-five, or 42 per cent, of those obese persons were men less than sixty years old. Of twelve women less than sixty years old, six, or 50 per cent, were overweight.

Obesity is frequently mentioned as a predisposing factor for myocardial infarction. Yater,[2] however, found only a slight tendency for men with coronary disease to be overweight, while women tended to be obese more frequently. One author found obesity to be present in 23 per cent of cases;[13] another in 33 per cent of cases.[4] Just how obesity predisposes toward coronary occlusion (if it does) is as yet unknown. The role of cholesterol, fat, caloric consumption, and lack of physical exercise in the development of the arteriosclerotic process has not been ascertained to date. We know that a person of any constitutional habitus and weight may develop an infarction. However, we tend to agree with Arnott[22] when he says: "How much nicer it is when being stricken with coronary thrombosis to be told that it is all due to hard work, laudable ambition, and selfless devotion to duty than to be told it is due to gluttony and physical indolence!"

Other Diseases.—The incidence of gall-bladder disease and peptic ulcer was about 7 per cent for each disease which approximates the findings in the general population. Friedburg[7] suggests a rela-

tionship between gall-bladder disease and coronary artery disease while Breyfogle[12] emphasizes the higher frequency of coexisting myocardial and gall-bladder disease.

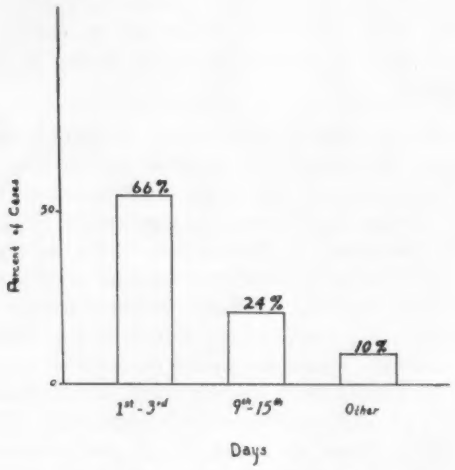

Fig. 3. Mortality-time distribution.

Mortality

Of the 254 patients, sixty-six, or 26 per cent, died. Of these, forty-four were men, or 22 per cent of the men in the study, and twenty-two were women, or 38 per cent of the women in the series. The mortality rate was almost twice as great in the group over sixty years of age where forty-one, or 33.5 per cent, of those in this age group expired. Only twenty-five, or 19 per cent, of those less than sixty years died. Patients with two or more infarctions had a higher mortality rate, 33 per cent in our series, compared to 24 per cent in those with their first infarction.

Over-all mortality rates are reported as being somewhere between 15 and 50 per cent, most being between 20 to 30 per cent.[6,16,17,18] Schnur[19,21] in a review of cases over a ten-year period emphasizes the fact that past and present associated illnesses, complications, and age of the patient determine the prognosis of any individual. He termed this the Pathological Index rating. Granted that the competency of medical staffs may vary from place to place, these factors of variable Pathological Indices, different age and racial groups, and dissimilar socioeconomic backgrounds makes comparison of mortality rates in different communities untenable.

TABLE V. CAUSE OF DEATH AFTER THIRD DAY

Cause	Number	Dicumarol Given	
		Yes	No
Cerebral infarction	1		1
Pulmonary infarction	2		2
Ruptured septum	1		1
Ruptured ventricle	2	1	1
Coronary failure		1	
Congestive failure	9	3	6
Cause not given or known	7	6	1

It is well known that the mortality rate from coronary occlusion increases with age.[16] Woods and Barnes[20] found the mortality to be twice as great beyond the age of sixty as below. The rate is also higher in patients who have a history of previous infarctions. In the Henry Ford Hospital, the study over-all mortality was 21 per cent, compared with 33 per cent among those with past infarction.[4] These figures approximate ours. The greater mortality among women in our study is probably explained by the increased average age of the female patients (Table II).

Of the fatal cases, 66 per cent expired within the first seventy-two hours of admission (Fig. 3). Another 24 per cent expired from the ninth to fifteenth day. This is the second most critical period, when the area of infarction within the myocardial muscle is least resistant to stress, and complications, such as cardiac rupture and thromboemboli, occur. No attempt was made to determine the exact mechanism of death in patients dying during the first three days because of inadequate documentation and low autopsy rate.

Table V shows the cause of death of twenty-three patients after the third day of hospitalization. It is difficult to determine the cause of death, although ventricular fibrillation is probably the most important, with congestive failure a close second in the immediate post-infarction period.[20] A report from the Mayo Clinic (which includes deaths during the first forty-eight hours) lists myocardial or congestive failure as the cause of death in 43 per cent of their 133 cases; coronary failure (persistent angina) in 23 per cent; rupture of the heart in 15 per cent; shock in 9 per cent; and thromboembolic phenomena in 6 per cent.[14] In our series, congestive failure was the most frequent cause of death after the initial three-day-period.

We found it very difficult to evaluate the efficacy of anticoagulants on reducing the mortality rate and incidence of complications. Dicumarol

was used in 160 of our patients with a resulting mortality of 12 per cent. The death rate in those not given Dicumarol was forty-seven, or 50 per cent. This apparent discrepancy in mortality rate is attributed to several factors. In the first place, at least half of those in the latter group died within the first three days, before the anticoagulant could be given or before it could have had any therapeutic effect. Secondly, many patients not dicumarolized were in the elderly age group where the mortality rate with infarction is higher anyway and where the risk of using anticoagulants is probably greater than any benefit derived. Because of these and other variable factors, we concluded that a statistical analysis of Dicumarol therapy in our series was not valid.

Summary

Prompted by the impression of a higher incidence of myocardial infarction in our local industrial community, a study was made of 254 cases of proven infarction admitted to the three Flint medical hospitals in 1954. These 254 patients were analyzed according to age, sex, race and occupation. The incidence of associated disease and the effect that each disease had on the subsequent mortality was ascertained. The mortality rate was further evaluated on the basis of sex, age, and history of previous infarction. The time of death during the hospital course and probable causes of death were determined. Since these were private patients under the care of many local physicians, it was not possible to make a controlled study of the efficacy of Dicumarol or other anticoagulants. We could only speculate about the etiologic and prognostic factors influencing each individual case of infarction.

Conclusions

1. The incidence of myocardial infarction is probably higher in an industrial community than in the general population. The exact number cannot be determined accurately.

2. Myocardial infarction is more common in the male patient (3.4:1) and in the white race.

3. Myocardial infarction in the premenopausal women is rare. Only one of sixty-eight women was in this group.

4. The peak incidence months were in midwinter and midsummer.

5. There was no occupational predisposition for myocardial infarction.

6. Patients in the sixth and seventh decades constituted 62 per cent of our series.

7. The location of the infarction and the height of the leukocyte count on admission had very little prognostic value.

8. Associated diseases of angina pectoris, hypertension, and diabetes mellitus had no appreciable effect on the mortality rate. Hypertension was less prevalent than in previously reported series.

9. Obesity occurred in 44 per cent of patients. Speculation concerning the role of obesity in the pathogenesis of coronary arteriosclerosis continues.

10. Our mortality rate was 26 per cent; it was greater in women, in the older age groups, and in patients with previous infarctions.

11. The most critical period following an infarction is the first seventy-two hours. Complications are also common some ten to fourteen days post-infarction. Congestive failure is the most common cause of death in this period.

Acknowledgment

We would like to acknowledge with appreciation the assistance of Dr. Gregory Quarry, M.D., resident physician at St. Joseph's Hospital, and Dr. Stanley Bardwell, M.D., resident in Internal Medicine at McLaren General Hospital, in compiling the data.

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(Continued on Page 1574)

Surgical Treatment of Pilonidal Disease

By J. Richard Heaton, M.D.
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APPROXIMATELY eighty years ago, J. M. Warren[1] and R. M. Hodges[2] published articles on pilonidal disease and started a controversy which has continued unabated to the present day. Their works suggested two possible etiologic mechanisms. One believed the disease was caused by an abnormal growth of hair and thus sponsored the theory of acquired origin. The other proposed a congenital origin by assuming that the condition arose through faulty closure of the neural canal. These two theories with many variations have been argued and discussed repeatedly down to the present day. Most authorities favor the latter and have produced embryologic evidence which is quite convincing. Recently, the excellent studies of Patey and Scarff,[3] Davage[4] and Gifford[5] have renewed the attempt to explain this disease as an inflammatory reaction to hair. The principal point of contention is the mechanism by which hair can arrive at a subcutaneous position. Thus we return to a variation of the original theory and are reminded that the etiology of pilonidal disease has not been established.

The problem of treatment has been equally confusing and innumerable surgical methods have been devised in an attempt to decrease the high recurrence rate so often obtained. In order to determine our own results, we have reviewed the records of all patients with pilonidal disease operated at this clinic from January, 1949, to December, 1955. The criteria of this follow-up study are as follows: (1) A minimum of one year's elapsed postoperative time in all cases, and (2) clinical evaluation of wound healing to the date of this writing in all cases. One hundred patients meet the above standards and our results are considered below.

General Principles of Treatment

Regarding the general aspects of treatment, the following principles furnish a useful guide:

1. Antibiotics have no value except for controlling an associated cellulitis. They do not actually penetrate the cyst or sinus to any appreciable extent and, therefore, can have little effect on the basic pathology.
2. Dyes should not be injected into the tract at the time of operation. In order to obtain good staining of the sinus and all of its ramifications, one must inject the dye with considerable pressure and surrounding tissues will also be stained.
3. Excessive amounts of tissue should not be removed. If all granulating and epithelialized tracts are removed along with the foreign material present, the removal of additional tissue serves no purpose except to make a larger wound. More tissue should be removed only as necessary to uncover pockets or to prevent excessive overhang of the wound edges.
4. The amount of suture material should be kept at a minimum. Pilonidal disease may be a foreign body reaction primarily and the introduction of additional foreign material should be curtailed.
5. Epilation of the area is a distinct advantage, but from a practical standpoint is difficult to accomplish. Swinton[6] has used x-ray epilation and feels that this procedure makes primary closure of the wound more successful. However, the dose of radiation must be carefully controlled. Frequent shaving of the area is helpful although it is impossible to remove all the fine hair along the wound edge. Depilatory creams may eventually be the answer to this problem if one can be produced which is not excessively irritating.
6. Meticulous postoperative care is most important regardless of the surgical procedure used.

Technique of Operation

A simple technique of operation with excision of the diseased tissue only and without closure of the defect is effective.

The patient is placed in the left lateral position and the area is surgically prepared and draped. A probe is passed into the sinus tract and released by incision. This process is repeated until all visible sinuses are opened. The tract lining is then excised and a search is made for additional tracts or pockets. The edges of the wound are trimmed to prevent overhang and produce a smooth defect. Hemostasis is then accomplished and the wound is packed lightly with gauze.

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Postoperative Care

The postoperative care consists of daily irrigation of the wound and removal of any loose packing. All packing is out by the third postoperative day. The patient remains in the hospital approximately eight to twelve days and is seen daily by his physician who debrides the wound with gauze or an applicator breaking down any webbing which has occurred. On discharge from the hospital the husband or wife or some other member of the family is instructed in this procedure and the patient returns for examination at two-week intervals. At these visits all hair is carefully shaved from the surrounding skin and excessive granulation tissue removed with the curette. Approximately two to four months are required for complete healing.

Analysis of Results

The average hospital stay was nine to twelve days. Following dismissal from the hospital the patients returned for treatment at two-week intervals for a period of two to four months.

We were surprised to find that 16 per cent of our patients were not cured by their first operation. However, 6 per cent of the cases were cured by a second operation, and the final failure rate reduced to 10 per cent. Included in this latter 10 per cent are nine patients who continue to have symptoms after one operation and one who continues to have symptoms after two operations. Fourteen per cent of this series had had one or more previous operations elsewhere.

Discussion

It will be noted that we have handled these cases in a very conservative manner using one of the older techniques which seemd to offer the best chance of permanent cure. The present study was inaugurated to determine whether or not we are justified in continuing along these same lines.

A review of the results of others who used a similar method of treatment proves interesting. In 1936 Kleckner[7] reported a series of 160 cases and described his method as apparently identical with ours. He had "no recurrences." According to Palumbo et al[8] the collective result in 4,884 cases treated by the open method showed an average recurrence rate of 12.7 per cent. Palumbo's own series of 151 patients treated by this method showed a 6.3 per cent recurrence rate. It is therefore difficult for us to explain our recurrence rate of 16 per cent for the first operation. However, our shortest period of follow-up was one year and the longest seven years, and it is conceivable that this longer period has brought to light some recurrences that would surely have been missed in a short term follow-up. At any rate, it is obvious that the excellent results often reported are not easily reproduced even in a group of private patients who can be adequately followed and controlled.

Innumerable surgical procedures have been described and their very number attests to the fact that none is completely adequate. Perhaps a basic error in the general approach to the problem these past eighty years has been made. We believe that Patey and Scarff, Davage, Gifford, Swinton and others have pointed out a new line of approach which may render any or all of the present surgical methods far more successful. These writers have provided good evidence that the disease is acquired rather than congenital and that the key to successful treatment is the control of hair in the sacrococcygeal area. Swinton reports markedly improved results in a small series of cases by using carefully controlled epilating doses of x-radiation to the sacrococcygeal area combined with a closed operative technique. It seems probable that the development of some safer and satisfactory method of epilation will be the next great advance in the treatment of this difficult problem.

Summary

Regardless of its etiology, pilonidal sinus disease is a simple clinical entity. It may be annoying to patient and physician because of its rather high persistence or recurrence rate following surgical treatment.

One hundred patients treated surgically for pilonidal disease are evaluated by a follow-up of not less than one year nor more than seven years. Eighty-four patients were "cured" by one operation. Six patients were "cured" by a second operation and the remaining ten patients have persistent symptoms.

In all these cases a simple surgical excision was used and no closure attempted. Normal adjacent tissue was preserved. Despite this, a final recurrence rate of 10 per cent is recorded.

We are inclined to believe that further progress in the treatment of this condition will be achieved

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A World of Medicine

International Newsletter No. 1

By Robert Hodgkinson, M.D.
Detroit, Michigan

MANKIND'S development has been marked by an increase in the size of the unit to which men have given service; from the family grew the tribe, from the tribe the nation, and from the nation groups of nations. Today there is a desire and a need for us to think in terms of a world community and many in medicine serve such world organizations as the World Health Organization and the United Nations International Children's Emergency Fund (UNICEF). In attacking the problems of international disease, in working and living outside their countries of birth, these physicians see problems in a world setting and help to develop the concept of a "world mind." Although speaking of achievements in the world-wide campaigns against yaws, malaria, tuberculosis and other diseases, the words of Balachandra Rajan, President of the Executive Committee of UNICEF, apply equally to the development of international cooperation: "Realism compels us to acknowledge that we have made only the beginning of a beginning. Yet to have begun at all is itself significant. The way is a long one; but no one any longer believes that the way is impossible."

Some of the problems and achievements of world medicine are illustrated by the statistical data supplied by the WHO and the United Nations.[1] We may note that Nepal, Cambodia, Afghanistan, Viet Nam, Nigeria and the Sudan, even today, have less than one physician for every 50,000 inhabitants, while Israel, Austria, U.S.S.R., Germany, United States, New Zealand, Iceland, Italy, Hungary, Norway, Hawaii, Denmark, Canada, and Switzerland all have more than one physician for every thousand inhabitants.

The infantile mortality rate, one of the more sensitive indices of medical care, has been reduced to below thirty per thousand in Sweden (18.7), Hawaii, the Netherlands, Norway, Australia, New Zealand, England and Wales, Denmark and the United States (27.9). But in Guatemala, Bolivia, Chile, Ecuador, Peru, Egypt, the Gold Coast, Yugoslavia, Burma, India, the Philippines, and in other countries for which figures are not available, it remains at over 100. It may be predicted that the infantile mortality rate in the latter countries will fall quickly in view of current progress and the fact that the conditions are little worse than those found elsewhere at the beginning of the century. In the Netherlands, for instance, the rate was 104 in 1900, 51 in 1930 and 20 in 1955. In Hawaii, the reduction was from 94.2 in 1926 to 20.5 in 1955. Many countries were in fact "undeveloped" but a short time ago.

North America

A group of local women founded the Hospital for Sick Children of Toronto in 1885. Several dwelling houses were successively used before a hospital to accommodate 180 patients was opened on College Street in 1892. This was gradually expanded until it had 320 beds. The hospital has been a pioneer in the care of children. For instance, in 1901 it was the first hospital in the Dominion to appoint a woman on the intern staff; in 1913 the nurses library was the only one of the kind in the world and contained every book on nursing printed prior to 1913; in 1914 it supplied the only scientifically pasteurized milk in the Dominion of Canada; in 1915 it established the first whooping cough clinic in America; and in 1936 it opened the country's first department of psychological medicine for children.

The new hospital completed in 1951 (Fig. 1) consists of a thirteen-floor building on University Avenue in downtown Toronto, close to the University, the Connaught Laboratories, the Department of Hygiene and the Banting Institute. The structure of the building allows for vertical expansion should the need arise and by this means a further 100 to 200 beds can be added. The service floor contains the main kitchen, a cafeteria and a hydrotherapy pool, and the main floor the admitting, emergency and out-patients departments and an x-ray unit for the use of out-patients. The first floor is devoted to administration, consulting rooms, a library, a medical museum and

two auditoria, of which the larger will seat 275 and the smaller eighty-five. The operating theatres, the x-ray department, dentistry and facilities for angiocardiography and electro-encephalography are on the second floor. The third floor is occupied by laboratories and research departments. The fourth to tenth floors provide accommodation for in-patients. The ward units on each floor are complete in all respects and there is no interchange of personnel or equipment. Surgical patients are in the northern two and the medical in the southern. The age groupings for each floor are kept as nearly uniform as possible so that an interchange of bed space is possible. The eleventh floor accommodates one large and three small conference rooms, and the twelfth and thirteenth floors elevator equipment and fans.

In-patients statistics[2] give an idea of the work of the hospital and the frequency with which various diseases result in either admission or death. Despite the use of antibiotics, infections are high in the list of diagnoses, and they account for 15 per cent of deaths. Of almost 20,000 admissions, 20 per cent were for the treatment of chronic tonsillitis and adenoiditis. The next commonest diagnosis was acute laryngotracheitis, which accounted for 3 per cent of admissions. After this in order of frequency came the following diseases, each with an incidence of over 2 per cent: esotropia, gastroenteritis due to unknown cause, congenital inguinal hernia, bronchopneumonia and nasopharyngitis (the common cold). There were 434 deaths at the hospital in 1955. Death was attributed to congenital abnormality in 138 instances, infection in seventy-two, malignant disease (including leukemia) in forty-one, and postnatal asphyxia and atelectasis in fifty-eight. The deaths from infections included twenty-one due to bronchopneumonia, six to lobar pneumonia, ten to infections of the newborn, eleven to meningitis (pneumococcus five, *H. influenzae* three, *E. coli* one, meningococcus two), eight to gastroenteritis, eight to septicemia and pyemia, two to empyema and abcess of the lung, one to acute bronchitis, one to acute poliomyelitis, one to infectious hepatitis, one to measles, one to tetanus and one to Kaposi's varicelliform eruption.

The second annual report of the Research Institute[3] of the hospital, which is under the direction of Dr. A. J. Rhodes, provides a picture of an active and productive group of workers. The staff consists of twenty-seven physicians or science graduates working full time on research, and twenty-four physicians, dentists or scientists on a part-time basis. As a matter of policy, the number of full-time workers is being increased rather than part-time workers. Financial assistance from commercial organizations and private individuals is welcome, but it is hoped that such money will be contributed to the research program in general rather than to specific programs.

In the Virus Research Department, Dr. A. J. Rhodes has had the assistance of Dr. A. J. Beale, a virologist from the Medical Research Council in England. It was shown that many patients diagnosed as nonparalytic poliomyelitis were infected with the ECHO virus. The relationship of the group B Coxsackie viruses to meningitis was investigated. New tissue culture techniques have been used to study the etiology of epidemic croup (acute laryngo-tracheo-bronchitis) and what is apparently a new virus has been isolated from several cases. Dr. T. E. Roy of the bacteriology department has continued his studies on antibiotic sensitivity of pathogenic bacteria. Of 1,400 strains of staphylococcus, 60 per cent were resistant to penicillin, 39 per cent to streptomycin, 45 per cent to the tetracycline group, 7 per cent to erythromycin, 6 per cent to chloramphenicol and 0.5 per cent to bacitracin. Strains from patients in the outpatient department showed only half the incidence of resistance of strains recovered from in-patients.

The major activity of the institute is in the Biochemical Research Chemical Laboratories mainly in cooperation with the staff of the metabolic ward. Among many other projects, metabolic disturbances in relation to abnormal skeletal calcification in children have been studied. There has been research into improved methods of therapy for vitamin D resistant ricket. Rapid healing of the lesions occurred in these children without increasing vitamin D intake by establishing physiologic levels of serum phosphorus. The metabolic ward, a self-contained unit under the direction of Dr. A. L. Chute, Chief of Pediatrics, was opened in February, 1955, and during the next ten months fifty-one admissions of forty patients were made to the ward with an average stay of four weeks. Steatorrhoea, pituitary dwarfism, calcium and phosphorus metabolisms, renal diseases and the children of diabetic mothers have been studied on this unit.

In the surgical department, records of thirty-six

patients suffering from bone and joint tuberculosis and treated with the new chemotherapeutic drugs showed that 13 were apparently cured without fusion operation. All of these showed radiologic evidence of bone destruction but progressed to clinical and radiologic healing. In the department of neurology, Dr. J. Strobo Prichard and Dr. Douglas McGreal have analyzed the findings on 500 children suffering from convulsions in regard to etiologic factors, family and personal history and clinical findings. Members of the department of pediatrics have studied the causes of neonatal death in six obstetrical units in Toronto's hospitals. A series of lecture-demonstrations are being given throughout Ontario to focus attention on this problem. The inheritance of certain serum proteins has been demonstrated by the research group on genetics, and in an investigation of the etiologic factors of erythroblastosis foetalis, an analysis of seventy families provided further proof that the ABO groups are exerting an environmental influence on the sensitization of the Rh negative women. The high frequency of sensitization among Rh negative sisters suggests a familial incidence. In the cardiology department there is a program for the study of the effects of sulfonomides and penicillin in preventing recurrences of rheumatic fever.

Fig. 1. Hospital for Sick Children, Toronto.

Africa

An expert committee on schistosomiasis met at Brazzaville, French Equatorial Africa, from November 26 through December 8, 1956. The experts included Dr. W. Alves, Dr. D. M. Blair, and Mr. H. V. de Villiers Clarke of Southern Rhodesia; Dr. Botha de Meillon and Dr. R. J. Pitchford of South Africa; Dr. E. T. Abdel Malek from the Sudan; and Dr. P. L. LeRoux and Dr. J. Newsome of Great Britain. A survey of the incidence of the disease has been taking place since 1950, and it was shown that the infection is common in East and West Africa, Egypt, the Union of South Africa, and Madagascar. No cases have been reported from South-West Africa, Ruanda Urundi, Basutoland, and Mauritius. The conference discussed control methods with molluscides and by improved sanitation. Bilharziaisis is more common in animals than in humans. It is found in cattle, sheep, goats, camels, rodents, dogs, equines, antelopes, buffaloes, and even elephants. A study in the Philippines, however, has shown that man is responsible for 75 per cent of the production of parasites, while domestic animals account for the remaining 25 per cent. The importance of the animal reservoir of infection therefore remains uncertain.

Problems of surgery in Central and East Africa were discussed by Dr. Otto Bruckschwaiger recently.[4] An anesthetic machine is a necessity where a supply of oxygen is available, as open ether can rarely be used since heat and frequently altitude produce rapid evaporation. Chloroform may be used, but intravenous and local anesthesia are employed extensively.

Patients for operation are usually suffering from malnutrition, the result of poor diet, chronic diarrhea or other tropical diseases, and religious fasting. An orthodox Moslem is not allowed to swallow even his saliva during the four weeks of Ramadan and intravenous treatment or other medication is not permitted. Food is taken in small amounts during the night. Coptics exclude from their diet for four weeks any kind of food of animal origin. In these circumstances iron and

vitamin administration is given routinely before surgery. Blood transfusion has to be used with care, since most of the donors frequently suffer from anemia, give a positive Kahn reaction, or show evidence of other infectious diseases. The lack of a reliable electricity supply frequently makes refrigeration impossible, so that blood banks cannot be instituted. In these circumstances, a plasma expander, such as polyvinylpyrrolidone, has a definite place.

Injuries are common due to traffic in the cities, to knife and gunshot wounds and the bites of animals, snakes and mules in the country. Tetanus and rabies occur. Cutaneous ulcers are frequent and serious. These may be the result of specific infections, such as blastomycosis, coccidioidosis and other fungal diseases, syphilis, leprosy, anthrax, leishmaniasis and yaws. In hot, dry, sandy regions, desert sore occurs (Veldt sore or Barcoo rot). Dr. Bruckschwaiger observes that diphtheria or pseudo-diphtheria bacilli could be frequently demonstrated, and the condition responds to antibiotics and diphtheria antiserum. Tropical ulcers are found in damp, steamy climates, and usually affect the lower part of the leg. Vincent's spirochetes and fusiform bacilli are commonly found in these ulcers.

Europe

Just a hundred years ago the first of the three main contributions to the treatment of epilepsy was made—the discovery of the bromides. This was followed by the introduction of the sedative barbiturates by Hauptmann in 1912, and of Dilantin, a hydantoin, by Merritt and Putnam of Harvard Medical School in 1936. Introduction of the bromides by Sir Charles Locock in 1857 was significant because it led to the establishment of scientific treatment for the epileptic and contributed to the later introduction of other anticonvulsants. Previously, treatment had varied from such harmless rituals as wearing amulets containing "the root of yellow mullen dug in silence at midnight," walking three times around the communion table of a church at midnight, or the consumption of bizarre, nauseating concoctions containing human or animal remains. The *Stamford Mercury* of October 8, 1858, reported that "a collier's wife applied to the sexton for ever so small a portion of a human skull for the purpose of grating it similar to ginger and adding it to a nurture which she would give to her daughter as a remedy against epilepsy." The *Boston Medical & Surgical Journal* of December 25, 1856, observes that besides amputating limbs, amputation of the testicles seems to have been successful in curing epilepsy. Beatings and imprisonment under appalling conditions were common. Introduction of the bromides coincided with a period of social reform, part of which was aimed at the improvement of the lot of the mentally sick and the epileptic. When Merritt and Putnam in 1936 were testing their theory that the effectiveness of bromides and phenobarbital were not based purely on their sedative properties, they found the amount of phenobarbital which would prevent an animal from walking raised the threshold for convulsions three or four times the original level, whereas a similar amount of bromide only raised the threshold 50 per cent.

Sir Charles Locock[5] introduced potassium bromide for the treatment of epilepsy at a meeting of the Royal Medical and Chirurgical Society on May 11, 1857, at which he was acting as chairman. Following an analysis of fifty-two cases of epilepsy by Edward H. Sieveking, an assistant physician at St. Mary's Hospital, Locock remarked that two causes of epilepsy, dentition and onanism had not been mentioned in the paper. He had read in the *British and Foreign Review* an account of an experiment performed by a German on himself with potassium bromide. The experimenter had found that this drug produced temporary impotency. With this background, Dr. Locock had treated fourteen or fifteen cases of epilepsy with the drug over a period of fourteen months, and only one had failed to respond.

The career of Sir Charles Locock was based on his skill and shrewd practical ability as a physician-accoucheur. Apart from a number of articles in the *Cyclopaedia of Practical Medicine* in 1833 and 1834, he contributed little to medical writing. In fact, in his presidential address to the Royal Medical and Chirurgical Society he observed "For many years I have been too much engrossed with the more active pursuits of my profession to be able to devote myself to those labors which might have increased if not enriched our stores of medical literature; and I have felt that I have neither the strength nor health enough to have attempted both departments." His health was always a preoccupation and a story is told of him that he wrote to a medical colleague he did not know personally requesting his opinion about

a patient's heart. He presented himself instead of the patient and received the letter "Dear Dr. Locock: I have examined your patient's heart and he has no more heart disease than you or I have."

Dr. Locock qualified in Edinburgh and wrote as his doctorial thesis, "De Cordis Palpitatione," which he presented in 1821. Transferring from Edinburgh to London he made very rapid progress in his career. When most London physicians were hardly beginning to make their name, he had attained the highest position open to him in being selected, at the age of forty, as Queen Victoria's physician-accoucheur. During his career in the town his practice was extensive, perhaps the largest ever enjoyed by an obstetrical physician.

South and Central America

At the Ninth Directing Council Meeting of the Pan-American Sanitary organization which took place in Antigua, Guatemala, in September, 1956, a budget of almost four million dollars was approved for 1957. Approximately a third of this sum is derived from the World Health Organization and the United Nations Technical Assistance Program. Top priority was allocated to malaria eradication in the Americas, and the U. S. government contributed a further one and a half million dollars for this purpose. Although a large amount of the malaria cases in the Western Hemisphere occur in Mexico, the Mexican government hopes to eradicate the disease within five years. Leprosy was discussed and it was noted that the psychological approach to the disease has been completely changed by modern treatment with the sulphones. Although a more lengthy project than malaria control, it is nevertheless hoped that leprosy also can be eliminated from the Americas.

The Pan-American Sanitary Bureau[6] is the oldest international health agency in the world and it acts as the regional office for the youngest, the World Health Organization. It was created in 1902 to coordinate and assist public health programs in the various countries. In 1924, broader authority was given by the Pan-American Sanitary Code which was a treaty ratified by all twenty-one American republics. Although the head offices are in Washington, there are zonal offices in Mexico, Guatemala, Lima, Rio de Janeiro and Buenos Aires. There is also a field office in Kingston, Jamaica, to deal with the thirty-three separate administrations in the Caribbean. Conferences are held every four years and Directing Council meetings are held in the intervening period.

The bureau transmits reports of quarantinable diseases to neighboring countries and to the World Health Organization headquarters in Geneva. From Geneva the information is broadcast by fifteen radio stations for ships at sea and it is also incorporated in the weekly epidemiologic report. The bureau also promotes the collection of health vital statistics, work on the standardization of biologic products, and the international control of drug addiction. Other activities include education and training, public health administration, and control of communicable disease. In the field of education, special teaching courses are held, over 300 fellowships a year are given to promote training of public health personnel, a medical information center promotes free exchange of information and there is a regional center for training health statisticians in Chile. In public health administration the bureau accepts responsibility for the Institute of Nutrition of Central America and Panama (INCAP) which is located in Guatemala City and is a joint enterprise of the six central American republics. Advice is given on mental health programs and the planning of rural sanitation and the supply of pure water. In the control of communicable diseases the bureau has sought to eliminate the urban vector of yellow fever, *Aedes egypti*, and nine countries including Brazil are now declared free of this mosquito. Assistance given to two South American laboratories has enabled them to produce anti-yellow fever vaccine for the protection of people living adjacent to jungle areas. In Haiti almost all the population has been treated for yaws, and the incidence rate has now dropped to below 1 per cent. The Bureau acts as the Regional Influenza Center for W.H.O. and it has in turn designated seventeen laboratories and one reference center to collect information on the spread of influenza. Four countries have conducted mass vaccination programs against diphtheria and whooping cough and aid has been given in the production of the necessary vaccines.

Southeast Asia

In welcoming 850 tuberculosis specialists and workers from sixty countries who gathered in New Delhi, January 7 to 11, 1957, to take part in the 14th International Tuberculosis Conference, the President of India Dr. Rajendra Prasad stated

that, although tuberculosis has ceased to be a serious health problem in the more advanced countries, yet it remains one of considerable magnitude in Southeast Asia. He felt that in India, where people could spend their lives largely in the open air and sunshine, it would be easier to control the disease than in countries where the climate necessitated more indoor living. Nevertheless, there was serious difficulty due to undernutrition and some habits of life. The Health Minister, Rajkumari Amrit Kaur, observed that nearly 170 million persons will have been vaccinated against tuberculosis by 1960, and already 80 million people had been tuberculin tested, with 28 million vaccinated. There were 235 tuberculosis clinics in the country and 300 would be established during the current Five-Year plan. In addition, a number of teaching hospitals would train workers and demonstrate how modern clinics ought to function with emphasis on prevention. Four such centers were already operating, one was in the process of being established and ten more would be added during the current Five-Year plan. Professor Etienne Bernard, Secretary-General of the International Union against Tuberculosis, was of the opinion that the only way to solve the problem of tuberculosis was to increase the power of resistance of the subject.

In a discussion on the "Diagnostic and Biological Problem of Isoniazid-resistant Tubercle Bacilli," Dr. Walsh McDermott pointed out that this drug, because of its therapeutic efficacy and cheapness, was specially useful in countries like India where patients were numerous. He suggested that children and young adults who were infected with tubercle bacilli or were found to be tuberculin positive should be treated even if there were no symptoms of the disease. Dr. P. V. Benjamin, Tuberculosis Adviser to the Government of India and President of the International Union against Tuberculosis, summarized the majority view as being that Isoniazid should be used with either P.A.S. or streptomycin.

At a press conference, Dr. Caroll E. Palmer stated that, although there were reactions to BCG, the vaccine was of "enormous advantage" in checking the disease, and Dr. A. Frappier of Canada felt that vaccination with BCG which had been tried in Canada since 1926 was a harmless procedure even in people of low nutrition. Dr. Philip Chebanov of the USSR observed that the procedure had been used in the Soviet Union since 1924 and that it was now obligatory that children in maternity hospitals should be vaccinated. Prof. Etienne Bernard said he knew of no country which had withdrawn or reduced the tempo of its BCG campaign.

Whether persons suffering from lung tuberculosis should be treated in sanatoria or as out-patients was discussed at a sub-committee under the chairmanship of Prof. J. W. Crofton of Edinburgh. The consensus of opinion from representatives from Germany, Canada, Denmark, Egypt, India, Spain, Switzerland, the U. S. and the USSR, was that with certain limitations the clinical and epidemiologic results of ambulatory chemotherapy were as good as those obtained in sanatoria. Dr. A. Latif Hassan of Egypt pointed out that it might be dangerous and might retard the progress of the tuberculosis campaign if its limitations and dangers were not fully known to all practicing physicians. Dr. M. Gilbert of Switzerland felt that in severe cases there were advantages in making the initial attack in a hospital or sanatorium, while Dr. B. K. Sikand of India said that hospitalization was essential for surgery only.

Australia and New Zealand

In the *Australian Medical Journal*[1] Maori attitudes to sickness are discussed by Dr. G. Blake-Palmer, Medical Superintendent, Seacliff Hospital, Seacliff, Otago, New Zealand. The inherent danger in some Maori therapy, such as the favorite method of immersing the sick in water at dawn and sundown—not infrequently a stagnant cattle pond—and the serious delay in the instituting of effective treatment brought the Western physician and the present-day Tohunga (one claiming skills in ancient lore) not infrequently into conflict. The former, too, may also be confused by his ignorance of Maori magic. Apart from this, Maori medicine contained, before the arrival of the European, many valuable methods of treatment and is part of a culture embracing modes of conduct absent in modern civilization.

Formerly the Maoris believed that illness was due to violations of tapu, the intervention of demons, or, not infrequently, the machinations of the Tohunga Makutu (a man skilled in dealing with evil or malignant mana). If disease was due to a breech of tapu, neglect of the sick was logical and not due to callous indifference. The sick person was a source of danger and if he died his dwelling had to be destroyed. Therefore, he was

often cared for in an outhouse. In addition to magical practices, Maori medicine made use of herbs and physical methods of treatment. For example, fractures were treated by the use of lacebark in a similar manner to Gooch splinting, convulsions were treated by burying the patient up to the neck in sand or loose soil to minimize injury, and the partially drowned were resuscitated by suspending the affected person by the legs round the neck of a large warrior who grasped the wrists and moved the person up and down.

Some parts of the body were considered to be highly tapu. All female generative secretions were regarded as highly noxious, and one of the objections to entering European maternity hospitals has been that the placenta could not be buried in a secret place. In contrast, the male organ represented life, and many of the ceremonies for protection against disease and danger took place in the village latrine. The Maori attached great importance to kinship and family and the center of Maori culture was the open space in front of the meeting house, the supports of which were covered with ancestral figures. A free sexual code was practiced and there was no hindrance to free premarital sex relations between adolescents. Children were welcomed and freely adopted. After marriage a reasonable measure of fidelity was expected however. After periods of intense spoiling and petting children were allowed a great deal of freedom as judged by European standards.

The mentally ill were frequently feared and sometimes eliminated. Today the admission rate of Maoris to mental institutes is significantly lower than that of those of European origin, and this cannot be accounted for solely by reluctance to seek aid. Maori culture contains within itself some "mental health coping mechanisms" or factors which serve to protect a person's mental life. There is first of all the sense of oneness and belonging to the tribal organization. "A Maori gathering may be said to have lifted gossip to the dignity of a mental health coping mechanism" and checks not only nonconformist behavior but also publicly explores new methods of behavior. The ability of the Maori to develop grievances especially against the Europeans helps to preserve the sense of integrity of the Maori community and provides excuses for non-cooperation. Alcohol which may be used to excess is another coping mechanism. The Maori is also adept at transferring his attention rapidly away from an immediate threat of an unpleasant problem.

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MYOCARDIAL INFARCTION

(Continued from Page 1565)

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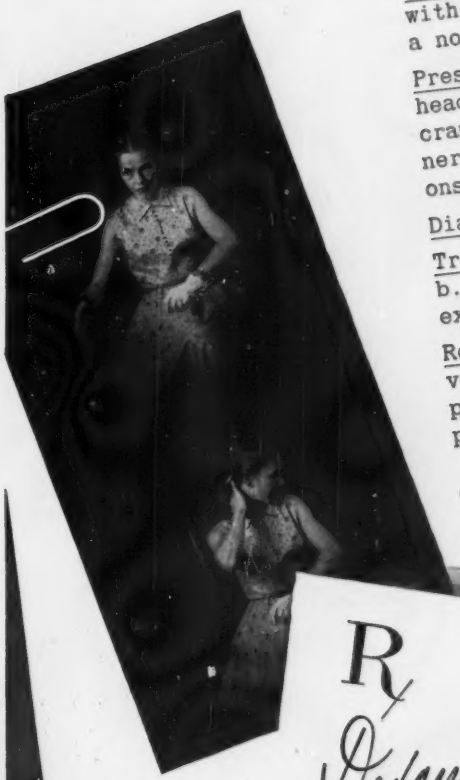

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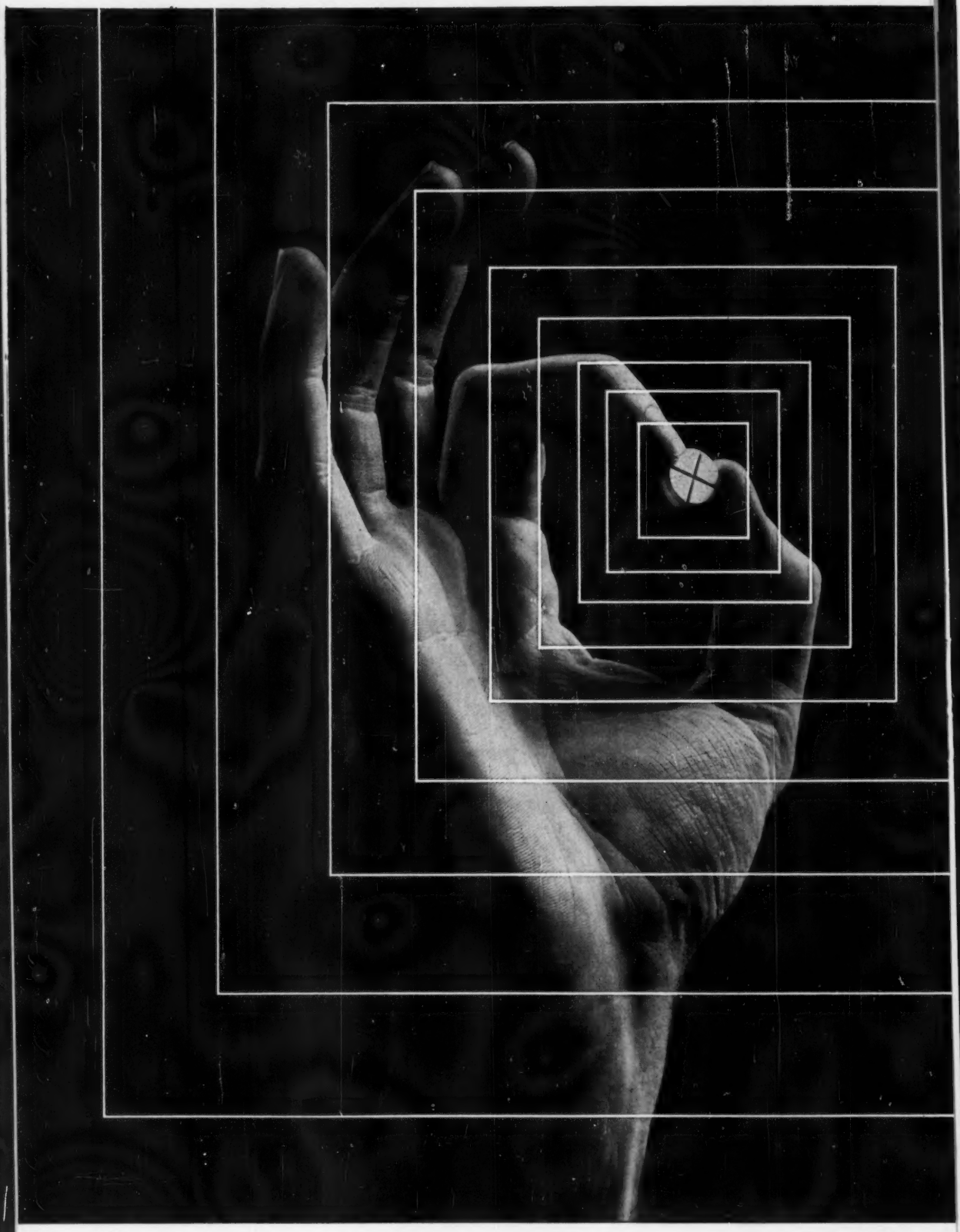

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Prolapse of Gastric Mucosa

By Maxim P. Melnik, M.D.
Detroit, Michigan

PROLAPSING gastric mucosa is the extrusion of the gastric mucosa through the pylorus into the duodenum.[1] This is an abnormality involving redundancy of the mucosal folds in the pre-pyloric region. "If these folds are sufficiently long and sufficiently loose they can be washed through the pylorus and into the duodenum during normal peristalsis."[2] The first case was reported by von Schmieden in 1911, although he did not mention actual extrusion of the antral mucosa through the pylorus into the duodenum. In 1925, Eliason and Wright[3] described a case in which they found a complete cuff of redundant gastric mucous membrane slipping through the pylorus and palpable as a doughy mass in the duodenum at operation. During palpation it slipped back into the stomach, but when the stomach was opened it could again be pushed into the duodenum. In 1926 Eliason, Pendergass, and Wright[4] reported two more cases and listed diagnostic criteria for x-ray demonstration of pedunculated growths and prolapsed mucosa. Only isolated reports are found in the literature from that time until 1946, when Scott[5,6] presented an excellent review of the subject and revived an interest in its diagnosis and clinical significance. In a review of 1,346 cases of diseases of the upper gastrointestinal tract, he found fourteen cases of prolapse, an incidence of 1.04 per cent. Others have reported an incidence of from .1 to 14 per cent in upper gastrointestinal tract roentgen examinations.[7,8] In 1951, Kaplan and Shepard[9] reviewed the literature and found forty cases of prolapsed gastric mucosa which were proved at operation, and added four cases of their own. They found well over 100 cases of prolapse reported from roentgenographic findings. One other case, previously reported and proved by surgery, was not included in their review.[10] Johnson in 1952 reviewed 1,593 cases of upper gastrointestinal roentgenologic examinations and found 117 cases of prolapse, an incidence of 7.3 per cent.

This study was done at the Department of Surgery, University of Michigan Hospital, Ann Arbor, Michigan.

Etiology and Pathology

Forssell[11] showed that the muscularis mucosae were capable of independent motion and were largely responsible for the rugal folds. Golden has explained that during antral systole the muscularis mucosa, for some unknown reason, fails to keep the mucosal folds in their normal longitudinal distribution and, if the folds are not so orientated, the mucosa becomes rolled up and is pushed along in the direction of the pylorus. Others have thought that chronic irritation of the gastric mucosa due to physical, nutritional, chemical, functional, or bacterial causes might result in chronic inflammation and hypertrophy. Scott considered that conditions necessary for prolapse occurred only after the flexible fibers of the submucosa had become stretched and loosened by abnormal peristalsis and are in time irritated by neurogenic or chemical stimuli or a combination of both. Manning and Highsmith[12] emphasized the importance of chronic hypertrophic gastritis from any cause involving the antral mucosa. The interference with the normal mechanism of antral systole will result in the development of prolapsing redundant mucosa in the majority of cases.

Manning and Gunter[13] were able to study the gross and microscopic pathological manifestations in six cases. In five there was a mild to severe gastritis. Grossly and microscopically the gastritis appeared to be of the hypertrophic type, except in one case in which atrophic changes predominated. In four cases the submucosa was unusually loose, so that it appeared as a tongue-like polypoid fold protruding through the pylorus. In one case the prolapsed mucosa was an hypertrophied fold which was forced caudally into the duodenum by the massive pyloric muscle. The pyloric muscle was thickened, and the pyloric channel appeared narrowed in four cases. The muscularis mucosae were also thickened in three cases and showed myelolytic infiltration in one case.

The prolapse may be unilateral or circular and

complete. In the unilateral type a portion of the prepyloric gastric mucosa slips into or through the pyloric canal presenting itself on one side of the base of the duodenal bulb projecting into the lumen. The pyloric sphincter contracts on the mass, the end of which becomes swollen and engorged, while the portion in the canal is stretched out. In the circular type there is a complete separation of the prepyloric mucosa from its muscularis. The mucosa slides through the pylorus in the form of a cylinder propelled by peristalsis and may remain fixed there in a manner similar to a small intestinal intussusception, except that here only gastric mucosa is involved, whereas in the small gut all the layers are involved. The cylinder of tissue presents in the base of the bulb of the duodenum, and a central depression marks the pyloric canal. There is also a certain degree of obstruction, inflammation, and hemorrhage in cases of prolapsed antral mucosa. In one case of prolapsed mucosa, malignant change was noted. A malignant neoplasm arose in a polyp which was attached to the redundant gastric mucosa.[14,15] Prolapsed mucosa can become strangulated or eroded and occasionally a massive hemorrhage may complicate this condition. Sometimes an ulceration may develop on the prolapsed portion and it can co-exist with duodenal ulcer.[1]

Symptoms

There is a gamut of symptoms, protean and vague as they might be, related to prolapse of the gastric mucosa into the duodenum which may give a clue to consider this condition in the differential diagnosis. It is also possible to have this condition without any symptoms referrable to upper gastrointestinal disease other than just loss of weight. There is no symptom-complex pathognomonic of the disease and it is rarely diagnosed before roentgen studies. The symptoms include intermittent epigastric distress, fullness, gaseous distention, nausea, vomiting—often without nausea preceding. About 25 per cent are relieved and 75 per cent are aggravated by food, and only a few relieved by alkalies. Obstructive symptoms with distress after eating were noted by Rees. In several cases, gross hematemesis occurred. Pendergass and his associates stressed the incidence of secondary anemia of a severe grade due to ulceration and oozing. Ellison and Squire[16] were impressed by cramp-like distress in the epigastrium of varying severity, generally worse under nervous tension. One should suspect this condition in any atypical history of peptic ulcer. The symptoms of nausea, vomiting, and epigastric pain come on periodically and suddenly with an interval of relief. Change in position, such as lying down, turning from one one side to the other may relieve or aggravate the symptoms. Some patients have pain only at night and are awakened and forced to get up. The duration of the symptoms may be for a few hours or for many years. Both sexes are afflicted, but males predominate. The age incidence is from eighteen to eighty-three years of age. Backus[17] concludes that moderate degrees of redundancy of the pyloric mucosa are not uncommon and that unless there is an associated gastritis or actual prolapse of the gastric mucosa into the duodenum interfering with gastric emptying, symptoms are not produced. Other investigators believe lesser degrees of prolapse without associated gastritis are capable of producing symptoms.[18,19]

Roentgen-ray Diagnosis

The diagnosis of extrusion of the gastric mucosa through the pylorus into the duodenum is fundamentally roentgenologic. An occasional case may be suspected before the diagnosis is established. However, there is no possible confirmation except by x-ray examination or by operation. Patterson and Weintraub have briefly listed the following radiologic criteria to make a diagnosis of this condition:

"1. A cauliflower-like defect in the base of the duodenal bulb. This defect is also described as being 'mushroom' or 'umbrella' shape.

"2. Folds of the gastric mucosa visualized in the pyloric canal and in the base of the duodenal bulb. The pyloric canal is frequently widened. The prone and the prone right-oblique positions are the best for visualizing this condition, while very often it is not seen in the erect position. The prolapse is frequently noted during the fluoroscopic observation and spot films taken at that time are valuable. It must be remembered that the presence of the prolapse may be noted on one examination but be absent at a second examination or vice versa. Negative x-ray findings do not exclude the disease. If symptoms warrant, the roentgenologic examination should be repeated.

"The most common error in the x-ray diagnosis of this condition is when it is mistaken for gastric prolapse, a defect in the base of the duodenal bulb caused by pressure or overlapping of the pyloric value. This defect is crescent-shaped and smooth in outline. Less frequently a pedunculated polyp, induration secondary to an ulcer, or inflammatory changes in the duodenal mucosa may be misinterpreted as prolapse of the gastric mucosa. Hypertrophied mucosal folds are often seen in

the antrum of the stomach suggesting the presence of gastritis. On the other hand, prolapse may occur with no evidence of gastritis."

Gastric polyp may sometimes be diagnosed as prolapse, but when in doubt a laparotomy should be performed upon the patient in question.

The clinical importance cannot always be measured by the roentgen film appearance. For example, "This patient was treated for some months before I began to wonder if the prolapse might explain her failure to respond to treatment. This case with no suggestion whatever of prolapse on her first films and only a very poor demonstration on the three-hour film, was operated on and proved to have a strangulated prolapsed mucosa and a hypertrophied pyloric muscle. A pyloroplasty gave complete relief. The redundant mucosa was not excised." . . . cited by Johnson[1] in 1952.

Treatment

The patient with prolapsed gastric mucosa responds satisfactorily to the rational medical treatment, and a few, and only a few, do not respond to treatment. The latter patients are then candidates for surgical therapy, and some others may become surgical emergencies because of pain, intractable pyloric obstruction, or severe hemorrhage due to this condition uncomplicated and unconcomitant with other diseases such as peptic ulcer, or neoplasm of the stomach and duodenum. The medical treatment creates no problem, and therefore the remarks will hereinafter be limited to surgical treatment only as it also further proves the roentgen diagnosis. In the literature on the surgical treatment of prolapse of the gastric mucosa, there are different opinions as to what type of procedure should be used upon uncomplicated cases of prolapsing gastric mucosa. Some surgeons advocate pyloroplasty of the Heineke-Mikulicz type; others, sub-total gastric resection.[20]

From January 1, 1948, to December 31, 1954, there were about 24,000 upper gastrointestinal series done at the University of Michigan Hospital, thirty-four of which were roentgenologically diagnosed as prolapse of the gastric mucosa through the pylorus into the duodenal bulb. Only two were treated surgically, briefly depicted below:

Case 1 (677698):—A fifty-four-year-old white man was admitted on March 5, 1950, to the University of Michigan Hospital complaining of fatigue, nausea, and vomiting after meals for the past two years prior to this admission. X-rays revealed at this time a duodenal ulcer. The patient was relieved for one year by an ulcer regime. However, his symptoms recurred and became more severe as he wasn't able to tolerate solid foods of any kind.

Fig. 1. (Case 2.) Prolapse of the gastric mucosa through the pylorus into the duodenal bulb.

Physical examination revealed a white man of stated age, poorly nourished, pale, with sunken eyes, in no apparent distress. All vital signs were within normal limits and the physical examination was not remarkable. Laboratory: Urinalysis—2 to 3 plus sugar with subsequent clearing under therapy, CO_2; 75 Vol. per cent; NPN 44 mg. per cent. Other laboratory studies were within normal limits.

A review of the barium studies of the upper gastrointestinal tract showed an obstructive lesion at the gastric outlet which was thought to be compatible with a prolapse of redundant gastric mucosa, possibly a gastric polyp.

On March 10, 1950, a partial gastrectomy was done. At operation all organs had a normal appearance except for minimal scarring at the first portion of the duodenum just beyond the pylorus, which was considered as questionable evidence of scar due to previous duodenal ulcer. The duodenal bulb was not deformed. No polyp or prolapse of the gastric mucosa at the pyloric canal could be detected at the time of operation. Decision was made to do a partial gastric resection because of the intractable pyloric obstruction clinically. A Hofmeister type of subtotal gastrectomy was performed with retrocolic gastrojejunostomy. The patient tolerated the procedure well except for slight nausea and vomiting during the first few postoperative days. His recovery was uneventful. On March 19, 1950, he was discharged from the hospital and was instructed in a Meulengracht diet. At discharge he weighed 137 lbs. He was seen at the

clinic on March 29, 1950, feeling fine, gaining strength and weight.

Pathology Report: 1. Chronic hypertrophic gastritis. Grossly the appearances were compatible with prolapse. This condition has no microscopic features which are distinctive. 2. Polypoid structure in the gastric mucosa. This differs from the simple mucosal polyp in that the muscularis mucosae extends into the polypoid mass. No malignancy.

Case 2 (788086):—A fifty-three-year-old white man was first admitted to the University of Michigan Hospital July 3, 1954, with a history of good health until 1949 when nausea, vomiting and epigastric pain occurred. A cholecystectomy was done shortly after onset of these symptoms. The patient's symptoms continued, and somewhat later he was reoperated upon with a preoperative diagnosis of "reformed gallbladder." Again the patient was not well, as nausea, vomiting, and epigastric pain continued. Therefore, he was referred to the University Hospital for further studies and treatment. Except for hypospadius, physical examination was not remarkable. Vital signs and laboratory findings were within normal limits.

Roentgen-ray diagnosis: 1. Upper gastrointestinal series: Esophageal aerophagia and prolapse of the gastric mucosa through the pylorus into the duodenum (Fig. 1). 2. Gallbladder: Non-visualized and no regional opaque calculi could be identified.

The patient was operated upon July 22, 1954. The cystic duct stump was identified being approximately 3 mm. in length. The common bile duct was normal to inspection and palpation. No abnormalities were found in the abdomen and pelvic organs. The stomach and duodenum were normal to inspection and palpation. A 4 cm. incision in the pylorus was made in the direction of the long axis of the bowel on the anterior surface of the duodenum. The gastric antrum was inspected and palpated and no evidence of present or past ulceration was found. There was approximately 1¼ cms. of prolapse of the gastric mucosa into the duodenal bulb. This did not appear to be edematous or show signs of incarceration. A Heineke-Mikulicz type of pyloroplasty was performed. The previous longitudinal incision over the anterior surface of the pylorus was closed transversely, thus increasing the pyloric canal by 50 per cent.

The postoperative course was entirely uneventful, and the patient was discharged on July 30, 1954. He was seen on August 30, 1954, in the outpatient clinic without further complaints of gastrointestinal discomfort. He has never returned to the clinic since his last visit.

Conclusions

Prolapse of the gastric mucosa through the pylorus into the duodenal bulb is a frequent benign disease of the upper gastrointestinal tract. Many cases are asymptomatic. Most with symptoms can be relieved by proper medical treatment, but a few cases need operative treatment for relief of symptoms. The condition can be diagnosed only by roentgen-ray and can be further proved by an operation.

Thirty-four cases of prolapse of the gastric mucosa were roentgenologically diagnosed in the course of 24,000 upper gastrointestinal series at the University of Michigan Hospital. Two patients were operated upon, and in each case the diagnosis was substantiated. One was treated by partial gastric resection and the other by a Heineke-Mikulicz pyloroplasty, and each patient was relieved of his symptoms. The surgical procedure[21] must not impair the nutritional status of the patient, and therefore mature judgment and experience is of inestimable value as far as the future welfare of the patient is concerned.

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Kahn and Treponema Pallidum Complement Fixation Results in Syphilis and False Positive Factors

By Joseph F. Guyon, M.D.,
and Clinton C. Cole
Flint, Michigan

SINCE the fairly recent development of various serologic procedures for the detection of syphilis with antigens prepared from the *Treponema pallidum*, various workers have presented comparative studies between these newly developed tests and Standard Tests for Syphilis. Kahn et al compared the Standard Kahn Test with Treponemal Immobilization (TPI) results, and Magnuson and Portnoy have reported their findings in comparing the TPI with the *Treponema Pallidum* Complement Fixation Test (TPCF) and a standard complement fixation procedure. So far as the authors are aware, however, there have been no reported comparisons between the Kahn test and the TPCF. Since the Kahn test is probably the most widely employed test of its kind throughout the world and certainly within the state of Michigan, such a study was made in the Flint Department of Health Laboratory and Veneral Disease Clinic.

The study presented represents the laboratory results and clinical findings of the patients from 4811 blood specimens submitted for routine examination, and was in no way conducted on a selective basis.

All sera giving reactive or weakly reactive Kahn results were tested further with TPCF antigen according to the method outlined by Portnoy and his associates. In addition to those sera exhibiting reactive STS results, there were included twelve that had been reported reactive from one to six weeks previously but which were nonreactive at the time of examination in our own laboratory. As a laboratory control for the study, one hundred sera from donors with no previous history of reactive Kahn tests were examined in the same manner.

The accompanying tables show comparative results between the two test procedures according to stage of disease and history of previous antiluetic treatment.

Dr. Guyon is with the Venereal Disease Clinic, and Mr. Cole is Laboratory Director, Flint Health Department.

It is realized that some of the charts shown do not represent a large enough number of cases to be statistically significant; however, it is interesting to note that there appears to be a very excellent correlation in results obtained with the Standard Kahn Test and the *Treponema Pallidum* Complement Fixation Test in untreated syphilis. Of equal interest is the fact that in every instance of disparity in test results in treated cases, the difference seemingly is that of greater sensitivity with the Standard Test. Whether negativity in TPCF results is indicative of adequacy of treatment or whether sero-fastness is possible also with the newer tests is a matter of conjecture, requiring additional studies and comparisons.

As one might well expect, the greatest difference in test results appears among the thirty-two false positive reactors, and the disagreement might well have approached 100 per cent had the original reactive sera been available for TPCF testing. This fact stresses the importance of repeated serologic testing in suspected false positives, which as Kahn and others have shown are of an unstable nature and frequently not reproducible.

The utilization of both of these tests was especially helpful in those cases in which there was no positive history and the evaluation of the physical findings was difficult. In evaluating a history of a rash or a nonspecific dermatitis, the additional support of a reactive TPCF in conjunction with the Kahn served to establish a more substantial basis for diagnosis.

The difficulty of obtaining a previous history of venereal disease or treatment, plus the dearth of physical findings places the burden for diagnosis on a correlation of these two tests. In previously treated patients where there had been a variation of STS results, the TPCF served to strengthen the clinical impression.

Without exception, the previously untreated cases had no specific history or positive physical findings to support the diagnosis, and the complete correlation of the tests was the only means for establishing a criterion for treatment.

TABLE I. CONTROL. (STS NONREACTIVE SERA)

Number of Cases	Laboratory Results—Kahn vs. TPCF			
	Agreement		Disagreement	
	Number	Per Cent	Number	Per Cent
100	100	100.0	0	0.0

TABLE II. LATE LATENT SYPHILIS

Previous History	Number of Cases	Laboratory Results—Kahn vs. TPCF			
		Agreement		Disagreement	
		Number	Per Cent	Number	Per Cent
Treated	84	70	83.3	14*	16.7
Untreated	24	24	100.0	0	0.0

*Kahn reactive, TPCF nonreactive.

Summary

The foregoing was a study of 164 cases in which the results of the Standard Kahn Test and Treponema Pallidum Complement Fixation Test were correlated with clinical studies. Included were cases of early and late latent syphilis, congenital, cardiovascular, and neurosyphilis, and thirty-two false positive reactors.

The agreement of results in untreated syphilis was excellent and to a lesser degree in treated cases.

The disparity of results in false positive reactors emphasizes the need for an additional tool for investigating these cases. The TPCF was used for this purpose.

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TABLE III. EARLY LATENT SYPHILIS

Previous History	Number of Cases	Laboratory Results—Kahn vs. TPCF			
		Agreement		Disagreement	
		Number	Per Cent	Number	Per Cent
Treated	5	5	100.0	0	0.0
Untreated	3	3	100.0	0	0.0

TABLE IV. CONGENITAL SYPHILIS

Previous History	Number of Cases	Laboratory Results—Kahn vs. TPCF			
		Agreement		Disagreement	
		Number	Per Cent	Number	Per Cent
Treated	9	7	77.8	2*	22.2
Untreated	2	2	100.0	0	0.0

*Kahn reactive, TPCF nonreactive.

TABLE V. NEURO SYPHILIS

Previous History	Number of Cases	Laboratory Results—Kahn vs. TPCF			
		Agreement		Disagreement	
		Number	Per Cent	Number	Per Cent
Treated	3	2	66.7	1*	33.3
Untreated	1	1	100.0	0	0.0

*Kahn reactive, TPCF nonreactive.

TABLE VI. CARDIOVASCULAR SYPHILIS

Previous History	Number of Cases	Laboratory Results—Kahn vs. TPCF			
		Agreement		Disagreement	
		Number	Per Cent	Number	Per Cent
Treated	1	1	100.0	0	0.0
Untreated	0	—	—	—	—

TABLE VII. BIOLOGICAL FALSE POSITIVE REACTORS

Previous History	Number of Cases	Laboratory Results—Kahn vs. TPCF			
		Agreement		Disagreement	
		Number	Per Cent	Number	Per Cent
Treated	0	—	—	—	—
Untreated	32	8*	25.0	24†	75.0

*Previously STS reactive, repeat tests, Kahn and TPCF nonreactive.
†Kahn reactive, TPCF nonreactive.

Immediate Enjoyment

There has evolved in France a generation of French people with two immediate obsessions in life: (1) food and wine; (2) personal, immediate enjoyment. These two impelling desires have blanked out in France, at least for the time being, the basic desires of past generations of Frenchmen—for home ownership and family living with its old values, and for self-made security.—National Education Program Letter.

Cholografin for Intravenous Cholangiography

By E. H. Lansing, M.D.
and W. W. Glas, M.D.
Eloise, Michigan

THIS is a report on the intravenous use of Cholografin Methylglucamine as a diagnostic aid for suspected diseases of the biliary tree. Cholografin Methylglucamine is a 52 per cent weight/volume solution of the methylglucamine salt of N,N'-adipyl-bis (3 amino-2,4,6-triiodobenzoic acid). Other investigators have reported on the 20 per cent solution of this drug.[1]

Following intravenous administration of Cholografin Methylglucamine, it is normally rapidly excreted by the liver. Fifteen to thirty minutes later, it can be visualized by x-ray in the biliary tree. One to two hours later, the dye is concentrated in the gall bladder which is then visible by x-rays. This examination is easily carried out in conjunction with upper gastrointestinal barium studies.

The purpose of this study was to ascertain the value of this drug in diseases of the biliary system, and secondarily, its toxic reactions. When visualization of the biliary system failed, attempts were made to determine the reasons for failure. Eight liver biopsies were obtained.

Materials and Method

There were thirty-one patients in this study, twenty male and eleven female. All were hospitalized at Wayne County General Hospital. All patients had a complete history and physical examination prior to use of the drug. All of the patients presented signs and symptoms indicative of upper gastrointestinal or biliary tract disease. Liver function studies were carried out when indicated. Thirty-five 20 cc. ampules of Cholografin Methylglucamine were used. Four patients received a double dose of the dye.

When possible, all subjects were dehydrated slightly by restricting fluid intake during the night prior to administration of the dye. Benadryl 50 mgm. was given intravenously just prior to the intravenous administration of the dye. In general a small No. 25 needle was used to administer the dye. Duration of injection of the dye was ten minutes in most instances. X-ray views of the right upper quadrant were obtained every ten minutes for one hour, then once each for the next two hours.

Results

Fifteen of the thirty-one patients showed visualization of the biliary tree or the gall bladder by x-ray. There was non-visualization in the remaining sixteen subjects.

The average serum bilirubin for the patients who showed visualization was 0.48 mgm. per cent. The range of values was from 0.3 to 0.8 mgm. per cent. These values are lower than those previously reported by Wise and O'Brien.[2] The average alkaline phosphatase for this group was 6.1 with a range of 2.4 to 8.2.

Five of the fifteen patients who showed visualization had bromsulphalein (BSP) studies; these five patients showed 1 to 18 per cent retention of the dye at forty-five minutes.

Three of these fifteen patients were subjected to liver biopsy *after* the dye had been used. The only consistent microscopic findings were slight periportal inflammation and infiltration of questionable significance.

In this group of fifteen patients, the prothrombin concentration varied from 51 to 100 per cent. Cephalin flocculation and thymol flocculation tests were normal. The serum proteins were normal in eleven patients, while three patients revealed a 1 to 1 albumin globulin ratio. There was a reversal of the AG ratio in one patient.

Three of the fifteen patients who showed visualization of the biliary tree showed stones in the gall bladder or common duct. The remaining twelve patients revealed excellent visualization of the biliary tree without abnormality.

From the Department of Surgery, Wayne County General Hospital, Eloise, Michigan.

Sixteen patients did not show visualization of the biliary tree or gall bladder. The average serum bilirubin in this group was 5.3 mgm. per cent with a range of 0.3 to 18.6 mgm. per cent. The average alkaline phosphatase was 14.6 with a range of 1.6 to 46.00. The one patient in this group who had a normal serum bilirubin did not visualize for reasons which are not apparent.

BSP studies in this group of sixteen varied from 10 to 41 per cent retention at forty-five minutes. The prothrombin concentration varied from 20 to 100 per cent of normal.

Five liver biopsies were obtained in the group that did not visualize. The diagnoses were as follows:

1. Changes compatible with extrahepatic biliary obstruction.
2. Metastatic adenocarcinoma of liver of pancreatic origin.
3. Cholangiolitic hepatitis or obstructive jaundice.
4. Cholangitis and cholangiolitis.
5. Biliary cirrhosis.

Toxic reactions were encountered in six of the thirty-one patients. These were as follows:

1. Nausea during administration—no benadryl—too rapid administration of dye.
2. Nausea and dizziness—had benadryl—too rapid administration of dye.
3. Nausea and salivation—had benadryl—solution given too rapidly.
4. Nausea and vomiting—no benadryl.
5. Nausea, flushing salivation—no benadryl with double dose.
6. Nausea, vomiting salivation—no benadryl, injection stopped after 10 cc. given.

The high incidence of nausea and vomiting in this series is probably due to too rapid administration of the dye. Several physicians reported injections completed in five minutes, erroneously believing that pretreatment with benadryl would protect the patient. Despite the rapid administration, no serious toxic reaction occurred.

Conclusions

1. Cholografin Methylglucamine was of diagnostic value in suspected lesions of the biliary tree: (a) when serum bilirubin levels were 0.8 mgm. per cent or less; (b) when BSP retention at forty-five minutes was 18 per cent or less.

2. Liver biopsies of patients who had received Cholografin Methylglucamine demonstrated no significant microscopic evidence of hepatic damage.

3. Toxic reactions, probably due to too rapid administration of the drug, occurred in seven of thirty-one patients. (a) Benadryl did not prevent the occurrence of toxic reactions due to too rapid administration of the dye.

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PILONIDAL DISEASE

(Continued from Page 1567)

by the development of a practical method for controlling the regional growth of hair and not by the development of more intricate surgical techniques.

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Michigan Clinical Institute

The Michigan Clinical Institute is twelve years old!

During these past twelve years, leading clinical teachers from the length and breadth of our country have been brought to Michigan to participate in one of the finest three day "refresher courses" available anywhere. Although basically conceived and continued for the doctor in general practice, the scope of subjects covered has been such as to attract all segments of our Society.

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Each year brings forth advances in medicine, both in diagnostic procedures and in therapeutic "know-how," so that what we may have learned yesterday may be passé today. Hence, it behooves each of us, generalist or specialist, to attend and participate in this most excellent "refresher course." Our Society, through its most competent committees, have provided us in this Michigan Clinical Institute a device whereby in three days we can hear what it would take months to read.

In my two previous messages to you, I have emphasized the importance of the politico-socio-economic aspects of our present, and future, practice of medicine. We cannot forget them! However, we cannot forget that also we must keep abreast of the daily advances in the scientific and clinical aspects of Medicine! Through the proper admixture of all these facets of Medicine as it is today, we can continue to give to the American People, our patients, the finest medical care available on this earth.

See you at the Michigan Clinical Institute, Detroit, March 19, 20, 21, 1958!

Geo. W. Slagle.

President, Michigan State Medical Society

President's Message

Editorial

HOLIDAY GREETINGS

THE JOURNAL of the Michigan State Medical Society, the Officers, the Council, the Publication Committee and the Editorial Staff wish all of our members and readers the most happy and satisfying of Christmas seasons. We bespeak for all of us a contented and successful New Year with the knowledge of most worthwhile accomplishments.

THE CLOSING YEAR, 1957

The Michigan State Medical Society may well look back over this passing year with a feeling of real accomplishment in the field of medicine. There has been much that has been new. We have made tremendous advances in the realm of heart surgery and in the realm of anesthesia. Many of our surgeons have bypassed the heart and entered that almost forbidden field of surgery. Others have used an artificial kidney. We have seen advances made in the prevention of polio which bid fair to a stamping out of that disease. We have had the reaction of a new influenza entity and have seen a special vaccine produced which promises successful treatment. THE JOURNAL has had its share in presenting much of this work to our readers and has been happy to do so.

There is also an economic phase in the practice of medicine to which we have devoted an unusual amount of attention. For nearly three decades, the Michigan State Medical Society, through its committees and the Council, has successfully proposed methods by which the lower income group of people and the average person himself is able to change the whole program of medical service from a very unsatisfactory set-up of "call a doctor —care for the patient—use a hospital, if necessary," with the patient and his family struggling for weeks or months or years to pay the bills. Those who could pay immediately were in the great minority.

We now have a pre-payment concept with a budgeting of the costs of medical care. This program, in which Michigan was very much a pioneer, was most successful as far as it went, but for about three years various committees have been studying how to modernize and improve and extend the service. The year 1957 saw several committees completing reports and studies, saw the calling of an extraordinary session of our House of Delegates to consider emergency means. It became evident that more direct information must be obtained, so a Market Opinion Survey Study was authorized and accomplished. This material was presented at the regular session on September 23 and 24 and resulted in the adoption by the State Medical Society of a set of principles to govern the whole program of pre-payment medical care. The results of this opinion study were published in the November number of THE JOURNAL, also the complete set of principles, plus a shortened statement of those principles which was presented on a tipped-in tinted paper—four pages in the November JOURNAL.

By this action, the Michigan State Medical Society has pledged to its public a completely modernized and extendable program of pre-payment health insurance extending from a basic contract to a complete coverage where subscribers in groups may select the parts which meet their most intimate needs.

Indeed, this has been a most auspicious year.

THANK YOU

THE JOURNAL has continued its program of many years' standing of featuring in each issue some particular phase, committee, or other activity of the society. In January, THE JOURNAL was devoted to the Heart and the work of the Michigan Heart Association; in February, Genessee County and its Cancer Day; in March, Child Welfare; in April, the annual Cancer number, especially featuring cancer quackery; in May, Geriatrics, the aging patient; in June, for many years a special feature, Michigan Medical Service, with its annual reports, accomplishments and programs; July was devoted to the program and plans for the Annual Session; August featured the Upper Peninsula Medical Society—a very worthwhile development of the medical field in the Upper Peninsula and almost the stature of another State Medical Society; September featured Traffic Safety and Industrial Surgery; October, Men-

tal Health; November, the Physician as a Citizen—and very appropriately this number contained the report of our Market Opinion Survey with the program growing out of that study leading to the extension and increased function of Michigan Medical Service; December, as for years, announcements and programs for the next Michigan Clinical Institute.

For certain of these numbers, some of our members or committees have been asked to cooperate with the editor in assembling the material and sometimes in writing an editorial. This service has been accepted and the work well done. The editor wishes to express his appreciation to these volunteer workers. We wish especially to mention Herbert B. Elliott, M.D., Robert M. Heavenrich, M.D., the cancer co-ordinating committee, C. Allen Payne, M.D., Gabriel Steiner, M.D., David Sugar, M.D., Clarence I. Owen, M.D., T. P. Wickliffe, M.D., John R. Rodger, M.D., and Oliver McGillicuddy, M.D.

The editor wishes to express his appreciation and thanks particularly to the publication committee, to the various officers and councillors upon whom he has called for ideas, remarks, suggestions, who have co-operated in helping to establish an editorial policy expressing as nearly as we could what we believed to be the innermost feeling and sentiment of the Michigan State Medical Society.

MMS HISTORY AND FACTS

On November 30, 1939, Michigan Medical Service was incorporated. The incorporators were A. S. Brunk, M.D., Henry R. Carstens, M.D. (chosen chairman), Burton R. Corbus, M.D., L. Fernald Foster, M.D., Wilfrid Haughey, M.D., William A. Hyland, M.D., Henry A. Luce, M.D., Vernor M. Moore, M.D., Ralph H. Pino, M.D., Phillip A. Riley, M.D., P. R. Urmston, M.D., Mrs. Dora H. Stockman of the State Legislature, and Mr. William Burns, Executive Secretary of the Michigan State Medical Society. Upon motion, the following were also elected directors: H. H. Cummings, M.D., R. H. Holmes, M.D., O. D. Stryker, M.D., and Mr. William J. Norton, a financier, to be Treasurer. There have been complaints over the years that this Board of Directors was too self-determined and needed new blood. It is interesting that of the original board, four are still serving—two with no interruption, Wilfrid Haughey and Phillip Riley. One is serving with a six months' interruption—William A. Hyland, and one is serving with a two-year interruption—L. Fernald Foster. For a while, the Board had seventeen members, increased to twenty-five, then authorized thirty-five.

During the years, there have been ninety-one members, fifty-one of whom were doctors of medicine representing the profession, nine doctors of medicine representing the Hospital Service, eleven hospital administrators representing Hospital Service, and twenty persons representing the public. In 1942 and 1943, arrangements were made whereby the Michigan State Medical Society nominated membership to the Michigan Hospital Service Board and the Michigan Hospital nominated members to our Board, there being six representing each. The years of service are impressive, Phil Riley and Wilfrid Haughey—eighteen years, William Hyland—seventeen years and six months, E. I. Carr and John Reid, Michigan Commissioner of Labor—seventeen years, L. Fernald Foster—sixteen years, Robert H. Baker and Robert L. Novy—fourteen years, Ellery Oaks—thirteen years, Carleton Fox, D.D.S. and E. D. Sladek—eleven years, A. C. Kerlikowski—ten years. The group just mentioned contains only two representing the public—not doctors of medicine. Seven doctors of medicine have served nine years—three full terms. Three non-doctors served eight years. Three doctors and four non-doctors served seven years. Eight, of which three were non-doctors, served six years. Three, one being a doctor, served five years. Five people have served four years, fourteen have served three years, ten have served two years, fourteen have served one year, and five have served less than a year. Eight have died during their term of service, and three have resigned to enter the military service. The Board now numbers twenty-two doctors representing the medical profession, three representing the hospitals, three administrators representing the hospitals, and five representing the public—a total of thirty-three.

WITH FIRM AND REGULAR STEP

"It happened on a Thursday evening, October 30, 1947. The scene was the living room in the Grand Rapids home of Dr. and Mrs. A. B. Smith."

This editorial is being written on a Thursday morning, exactly ten years later and we are quoting from THE JOURNAL of the Michigan State

Medical Society, Volume 50, pages 632 to 661, June, 1951. Dr. Smith, at that time Councillor of the Michigan State Medical Society, had invited to his house at Senator Arthur Vandenberg's suggestion, Dr. Wilfrid Haughey, Vice President of Michigan Medical Service; Dr. L. Fernald Foster, Secretary of the Michigan State Medical Society; Mr. Wm. J. Burns, Executive Director, Michigan State Medical Society; and Jay C. Ketchum, Executive Vice President of Michigan Medical Service. The Senator wished authoritative information and requested to meet those best informed and able to answer his questions. It was a memorable occasion and at the close he said:

"You have done something in Michigan that you didn't know you were doing. You have established a public trust. Your Michigan Medical Service and Hospital Service (Blue Cross) are a public trust. You didn't intend to do it so and you didn't know that you had done it, but you have. You have taken $50,000,000 or so of the people's money and have used it for the benefit of the people. As such you are the trustees of the public trust."

In discussing the continuing demands upon the government for relief from the increased costs of medical care, Senator Vandenberg said:

"The medical profession is eternally, locally and nationally, opposing something that was proposed in Washington. You have approached the matter from the wrong direction. The way to defeat a program is not so much to oppose it as to make it unnecessary—to propose a substitute that is better, works easier and does not disrupt existing economy. The medical profession of Michigan has done one of the most stupendous pieces of socio-economic study that has ever been done without the aid of government or help of substantial subsidy. It has been done by private effort and by amazingly little capital.

"The medical profession of Michigan has shown that the socio-economic needs of her people can be solved by the very men most able and best equipped to understand the situation, who know the need and the remedy.

"You in Michigan have the answer to socialized medicine, have proved it to a quarter of the population of the State, but while doing a magnificent job, have done it quietly and undercover as it were. You have been afraid of publicity, the one thing you must have if you are to avoid socialized medicine. You would be amazed at how easy socialized medicine could be put across, even with all the vast sums spent in opposition. The medical profession has muffed the ball.

"As trustees of a great public trust, the profession must take the public into its confidence and make periodic reports. Such publicity is a public duty, not the advertising of an appendix operation or the merits of Dr. Jones. You must discharge that duty so efficiently that every individual will know the results in spite of himself. Such publicity will effectively forestall any socialized medicine plan that may be proposed."

The Senator said finally that what he wants as part of his fight to prevent socialized medicine is glaring publicity of the things we in Michigan have done so unbelieveably well. (Editorial, THE JOURNAL of the Michigan State Medical Society, December, 1947, page 1412).

During the years, we have referred to that meeting and the Senator's words many times, proud to have been consulted and proud to feel that the Society had carried on that trust to which he called attention. The very latest financial report shows that Michigan Medical Service has paid for services to our subscribers, medical and surgical services, over $250,000,000. The $50,000,000 referred to by the Senator was for complete hospital and medical services at that time, but the figures just quoted are for the Blue Shield program alone. We are happy in our memory of the Senator and in our ability to present this ten-year report of a continuing task and trusteeship which has gone beyond all dreams and expectations.

ELECTION OF OFFICERS

President-Elect

G. B. SALTONSTALL

Gilbert B. Saltonstall, M.D., was born in Cheboygan, Michigan, in 1906, the son of Brayton and Annie Saltonstall. In 1912, the family moved to Charlevoix, where Gilbert graduated from the Charlevoix High School as valedictorian in 1926. He entered the University of Michigan the same year and graduated with the degree of Bachelor of Science in 1931, and the Degree of Doctor of Medicine in 1933. In college, he belonged to the following fraternities: Phi Mu Alpha, Alpha Epsilon U, Kappa Kappa Psi, Kappa Beta Phi, Alpha Kappa Kappa-medical. His college activities included the Varsity Glee Club (four years), University of Michigan Band (five years), Michigan Union and Midnight Sons Quartet. His internship was served at Grace Hospital in 1933-1934.

He entered general practice in medicine and surgery in Charlevoix in 1934. He was Chief of Staff in the Charlevoix hospital from 1949 to 1956. He has been a member of the Northern Michigan Medical Society since 1934, serving as Secretary eleven years, as President, and as Delegate to the Michigan State Medical Society House of Delegates. He was Councillor of the Ninth District from 1950 to 1957, Chairman of the Publications Committee and member of the Executive Committee, 1954-1957. He holds a Michigan State Medical Society Fellowship in postgraduate education (1942), membership in the American Academy of General Practice (1949), and in the Michigan State Medical Society from 1934 to date. He is also a member of the World Medical Association and the Elks. He was married to Charlotte Mathauer in 1934; they have two daughters. Dr. Saltonstall was re-elected to the Council at the September, 1957 meeting, after which he was nominated for the position of President-Elect, and was elected to that post. He thereupon resigned as Councillor of the Ninth District.

ELECTIONS TO THE COUNCIL

Seventh District

J. F. Beer

Joseph F. Beer, M.D., of St. Clair, was born in 1912, graduated from the University of Detroit with a Bachelor of Science degree in 1933, Wayne University College of Medicine in 1938, and was licensed to practice medicine in 1938. He is a member of the Michigan State Medical Society Public Relations Committee, St. Clair County Medical Society, American Medical Association, International College of Surgeons, Industrial Medical Association, World Medical Association, and American Academy of General Practice. He is medical examiner for the Preschool Clinic and School Clinic, member of the American Red Cross Operation Mercy, Assistant Medical Officer of the United States Public Health Service, and served in the United State Air Forces Medical Corps from 1942 to 1946. He is on the Senior Courtesy Staff, Port Huron Hospital, and the Mercy Hospital in Port Huron; also the Senior Surgical Staff of St. Clair Community Hospital. He is a member of the Board of Directors of Michigan Medical Service and Chairman of the Medical Advisory Committee of that organization.

Eighth District

E. S. Oldham

Earle S. Oldham, M.D., was born May 24, 1908, at Petoskey, Michigan. He graduated from the Southwestern High School, Detroit, in 1926, from the University of Michigan with an A.B. degree in 1931, from Wayne University College of Medicine with a B.M. degree in 1936, and M.D. in 1937.

He interned at Evangelical Deaconess Hospital in Detroit in 1936-37 and held a residency in the same hospital in 1937-38. He has been in private practice in Breckenridge since 1938. He served in the Navy Medical Corps from 1942 to 1946 in the South Pacific, and has been a reserve officer since that time.

Dr. Oldham was married in 1938 to Mildred J. Pelz; they have no children. He is a Past President of Rotary and of Gratiot-Isabella-Clare County Medical Society. He is a member of the Michigan State Medical Society, American Academy of General Practice, Nu Sigma Nu, and Alpha Kappa Delta.

Ninth District

D. G. Pike

Donald G. Pike, M.D., was born in Detroit, Michigan, in 1915. He graduated from Wayne State University Medical School in 1939 and was in the United States Navy Medical Corps during World War II from 1942 to 1946. He is at present a Commander in the Medical Corps Active Reserve USNR.

From 1947 until the present, he has been in general practice in Traverse City. He served as Secretary of the Grand Traverse-Leelenaw-Benzie County Medical Society from 1948 to 1955; has been a delegate to the Michigan State Medical Society House of Delegates from 1949 to 1957.

He is a Past President of James Decker Munson Hospital and a Past President of the Traverse City Lions Club.

Tenth District

O. J. JOHNSON

Orlen J. Johnson, M.D., Bay City, is a 1930 graduate of the University of Michigan Medical School. He interned at St. Luke's Hospital in Cleveland and practiced in Marshall, Michigan, from 1931 to 1938. Following that, he received his Master of Public Health Degree at Harvard School of Public Health. He served with the Council on Industrial Health of the AMA, and did a surgical residency at St. Luke's Hospital in Chicago. After that he established his practice in Bay City and has been there since that time.

He has been Chairman of the Industrial Health Committee of the Michigan State Medical Society since 1955, and an alternate delegate to the American Medical Association for the Michigan State Medical Society since 1953. He has served in the MSMS House of Delegates since 1949.

He was Chief of Staff of the Bay City General Hospital from 1953 to 1955. He served as Chairman of the Executive Committee of the Bay-Arenac-Iosco County Medical Society, and has been Chairman of the Public Relations Committee of the Society from 1953 until the present time.

OTHER ELECTIONS

The delegates to the AMA House of Delegates, all of whom were re-elected, are: Wm. A. Hyland, M.D., Grand Rapids; J. S. DeTar, M.D., Milan; and C. I. Owen, M.D., Detroit. The alternate delegates, who were also re-elected, are: W. W. Babcock, M.D., Detroit; E. S. Sladek, M.D., Traverse City; O. J. Johnson, M.D., Bay City. The Speaker of the House, K. H. Johnson, M.D., Lansing, and the Vice Speaker, J. J. Lightbody, M.D., Detroit, were re-elected.

At the organizational meeting of The Council, D. Bruce Wiley, M.D., Utica, was re-elected Chairman and Winfield B. Harm, M.D., Detroit, was re-elected Vice Chairman. Wm. M. LeFevre, M.D., Muskegon, was re-elected Chairman of the County Secretaries Committee; B. M. Harris, M.D., Ypsilanti, was elected Chairman of the Publications Committee, and Ralph W. Shook, M.D., Kalamazoo, was re-elected Chairman of the Finance Committee.

At the meeting of the Corporation of Michigan Medical Service, the following were elected to membership on the Board of Directors: E. C. Baumgarten, M.D., Detroit, (re-elected); Clyde Knapp Hasley, M.D., Detroit (re-elected; Howard W. McGee, General Assistant Comptroller, General Motors Corporation, Detroit, representing the public; Roger B. Nelson, M.D., Assistant Director of University Hospital, Ann Arbor, representing the Michigan Hospital Association; John Reid, State Commissioner of Health, Lansing (re-elected); Walter Z. Rundles, M.D., Flint, representing the profession; Arch Walls, M.D., Detroit (re-elected); D. Bruce Wiley, M.D., Utica (re-elected).

PROLAPSE OF GASTRIC MUCOSA

(Continued from Page 1578)

15. Rubin, J. S.: Prolapse of polypoid gastric mucosa into the duodenum with malignant change. Radiology, 38:362, 1942.
16. Ellison, A. B. C., and Squire E. W.: Prolapse of gastric mucosa into the duodenum. West Virginia M.J., 49:237, 1949.
17. Backus, J. L.: Gastroenterology, Vol. I, p. 762. Philadelphia: W. B. Saunders Co.
18. Stillman, Sidney: Prolapse of the gastric mucosa into the duodenum; report of 8 cases. Florida M. A. J., 39:25, 1952-53.
19. Arnold, W.: Texas State J. Med., 48:758, 1952.
20. Blain, A., III, and Hamburger, S. W.: Refractory symptomatic prolapse of gastric mucosa relieved by gastrectomy. Ann. Surg., 141:77, 1955.
21. Zollinger, Robert M.: A lecture delivered before the surgical staff of the University of Michigan in 1954 on the nutritional status and on the choice of the operation on the stomach.

More than two-thirds of all industrial injuries occur in businesses with fewer than 100 workers. Small business is thus paying most of the estimated national annual cost of $2.5 billion for occupational injuries.—EDWARD T. DICKENSON, New York State Commerce Commissioner, in *Industrial Medicine and Surgery*, November, 1957.

Michigan Clinical Institute

Refresher Course

Sheraton-Cadillac Hotel, Detroit

WEDNESDAY-THURSDAY-FRIDAY, MARCH 19-20-21, 1958

C. E. Umphrey, M.D., Detroit
General Chairman

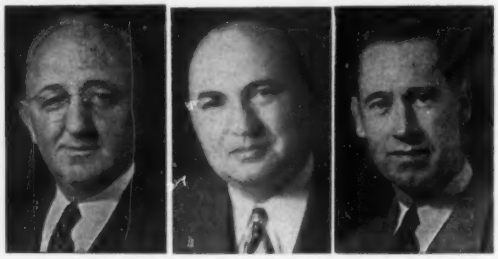
Information

- **THEME**—"Yesterday's Hopeless—Now Curable!"
- **HEADQUARTERS**—Sheraton-Cadillac Hotel; Assemblies and Exhibits on Fourth Floor; Press Room on Fifth Floor (Suite 500).
- **REGISTER**—Top of stairs—Fifth Floor—as soon as you arrive.

  Hours: Tuesday, March 18—1:00 to 5:00 p.m.
  Wednesday, March 19—7:30 a.m. to 5:15 p.m.
  Thursday, March 20—8:15 a.m. to 5:15 p.m.
  Friday, March 21—8:15 a.m. to 3:30 p.m.
- **NO REGISTRATION FEE** for Members of MSMS and other State Medical Associations, AMA, and Canadian Medical Association.
- **ADMISSION BY BADGE ONLY** to all Assemblies and the Exhibition. Please present your MSMS or other State Medical Association, AMA, or CMA Membership Card to expedite registration.
- **GUESTS**—Members of any state medical association, AMA, or CMA members from any province of Canada and physicians of the Army, Navy, and U. S. Public Health Service are invited to attend as guests. No registration fee. Please present credentials at the Registration Desk.
  Bona fide doctors of medicine who are associate or probationary members of Michigan county medical societies or who are serving as residents or interns, if vouched for by the president or secretary of the county medical society in whose jurisdiction they practice, will be registered as guests with no registration fee. Please present credentials at the Registration Desk.
- **MICHIGAN DOCTORS OF MEDICINE** in practice but who are not members of MSMS, if listed in the American Medical Association Directory, may register as guests upon payment of $25.00. This amount will be credited to them toward dues in the Michigan State Medical Society **FOR 1958 ONLY**, provided they subsequently are voted into membership by the county medical society in whose jurisdiction they practice.
- **TELEPHONE SERVICE**—Local and long distance telephone service will be available in the Sheraton-Cadillac Hotel, fourth floor. In case of emergency, physicians will be paged from the meetings by an announcement on the screen. Call the Sheraton-Cadillac Hotel, Detroit, WOodward 1-8000, and ask for the Michigan Clinical Institute extensions on the Fourth Floor.
- **CHECKROOM** is available in the Sheraton-Cadillac Hotel, Fourth Floor, next to Grand Ballroom.
- **GUEST ESSAYISTS** are very respectfully requested not to change time of their lecture with another speaker without the approval of the Committee on Arrangements. This request is made in order to avoid confusion and disappointment on the part of members of the audience.
- **PAPERS WILL BEGIN AND END ON TIME**—Nothing makes a scientific meeting more attractive than by-the-clock promptness and regularity; therefore, all meetings and panels will open on time, all speakers will be required to begin their talks exactly on time and to close exactly on time, in accordance with the schedule in the Program. All who attend the Institute are respectfully requested to assist in attaining this end by noting the schedule carefully and by being in attendance accordingly, in order not to miss that portion of the program of greatest interest.
- **TUESDAY EVENING, March 18**—Public Telecast of a Vascular Operation, sponsored by Smith, Kline & French Laboratories, Philadelphia.
- **TECHNICAL EXHIBITS**—Seventy-four interesting and instructive displays will open daily at 8:15 a.m. and close at 5:15 p.m., except on Friday when the exhibit breaks up at 3:30 p.m. Frequent intermisimisions to view the exhibits have been arranged daily before, during and after the assemblies.
- **THERE IS SOMETHING** of interest or education in the large exhibit of technical displays. **SAVE AN ORDER FOR THE EXHIBITOR AT THE MICHIGAN CLINICAL INSTITUTE.**
- **POSTGRADUATE CREDITS** are given to every MSMS member who attends the Michigan Clinical Institute. Notify J. M. Sheldon, M.D., Chairman, MSMS Committee on Postgraduate Medical Education, 1313 E. Ann St., Ann Arbor, Michigan.
- **PARKING**—Do not park on Detroit's streets. Inside parking at a convenient distance from the Sheraton-Cadillac Hotel is available at the DAC Garage, 1754 Randolph, the Grand Circus Garage, 1776 Randolph, and the Book Tower Garage, 333 State.

- **INFORMATION OF PRACTICAL VALUE IN DAILY PRACTICE** will be found at the Michigan Clinical Institute. All subjects on the Institute Program are applicable to clinical medicine. They stress diagnosis and treatment, usable in everyday practice.

- **PRESS RELATIONS COMMITTEE** for the 1958 Michigan Clinical Institute: A. B. Gwinn, M.D., *Chairman*, Hastings; H. F. Dibble, M.D., Detroit; Ralph W. Shook, M.D., Kalamazoo; C. L. Weston, M.D., Owosso, and J. J. Lightbody, M.D., Detroit.



C. E. Umphrey, M.D. B. E. Brush, M.D. K. H. Johnson, M.D.

- **C. E. UMPHREY, M.D.**, Detroit, is General Chairman of Arrangements for the 1958 Michigan Clinical Institute.

- **B. E. BRUSH, M.D.**, Detroit, is Chairman of the Program Committee for the 1958 Michigan Clinical Institute.

- **K. H. JOHNSON, M.D.**, Lansing, is Chairman of Committee on Arrangements for the Testimonial Luncheon Honoring Presidents of National Medical Organizations on Thursday, March 20.

- **WAYNE STATE UNIVERSITY COLLEGE OF MEDICINE ALUMNI ASSOCIATION** will maintain headquarters in the Sheraton-Cadillac Hotel during the Michigan Clinical Institute. All alumni, their guests, and friends of Wayne State are cordially invited to visit the headquarters. The room location will be posted at the registration desk.

MUCH THAT IS NEW AND INTERESTING WILL BE FOUND IN THE MCI EXHIBIT

THE "BLOCK SYSTEM"
at the
1958 MICHIGAN CLINICAL INSTITUTE

Surgery — Cancer Control — Aging — Wednesday morning, March 19

Trauma—Wednesday afternoon, March 19

Heart and Rheumatic Fever—Thursday morning, March 20

Steroids panel—Thursday afternoon, March 20

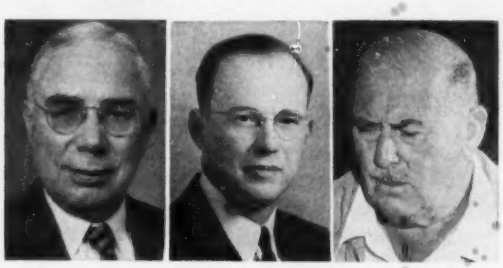
Obstetrics-Gynecology-Pediatrics — Friday morning, March 21

"Yesterday's Hopeless—Now Curable!"— Friday Afternoon, March 21

THREE DISCUSSION CONFERENCES

These quiz periods will be held Wednesday-Thursday-Friday, March 19-20-21, Grand Ballroom, Sheraton-Cadillac Hotel, 5:00 to 5:30 p.m. with all the guest speakers of the day invited to appear on the platform.

An opportunity is thus provided to ask questions concerning the presentations of the guest essayists, or to discuss one of your interesting cases with them.



Carl E. Badgley, M.D. Ann Arbor Leader—Wednesday, March 19

Gordon B. Myers, M.D. Detroit Leader—Thursday, March 20

Paul de Kruif, Ph.D. Holland Leader—Friday, March 21

MEETINGS OF SPECIAL SOCIETIES ALUMNI AND AUXILIARY GROUPS
(Details to be announced in January issue)

Tuesday, March 18, 1958

1. **Michigan Branch, American Academy of Pediatrics** is planning an all-day meeting in Ann Arbor.
2. **Michigan Chapter, American College of Surgeons** will hold an all-day Annual Meeting followed by reception and dinner.

Wednesday, March 19, 1958

3. **Michigan Regional Committee on Trauma, American College of Surgeons** is scheduling a luncheon-meeting.
4. **Cancer Control Luncheon** honoring Frederick A. Coller, M.D., Ann Arbor, and Laurance W. Kinsell, M.D , Oakland, California.
5. **Symposium on the Phrenotropic Drugs**, Grand Ballroom, Sheraton-Cadillac Hotel, 8:00 to 10:00 p.m. Sponsor: The Schering Corporation, Bloomfield, N. J.

Thursday, March 20, 1958

6. **Michigan Heart Association** will hold its annual Members Banquet and Meeting.
7. **Michigan Protologic Society** will hold its annual business meeting and dinner.
8. **Operating Room Nurses Institute** is scheduled for Thursday and Friday, March 20-21.
9. **Testimonial Luncheon** honoring Michigan's Presidents of National Medical Organizations.
10. **Michigan Society of Neurology and Psychiatry** and **Michigan District Branch of the American Psychiatric Association** will hold a reception and dinner followed by a scientific meeting.

Friday, March 21, 1958

11. **Michigan Heart Association** will hold a board meeting.
12. **Conference for Residents, Interns and Senior Medical Students**, 2:00 to 6:30 p.m.
13. **Testimonial Luncheon** honoring the pharmaceutical lecturer, sponsored by the Michigan State Pharmaceutical Association.

14. **Michigan Branch, American Academy of Pediatrics** will hold a testimonial luncheon.

ACKNOWLEDGMENTS—The Michigan Clinical Institute gratefully acknowledges the co-operation of:

1. The Michigan Regional Committee on Trauma, American College of Surgeons, sponsor of the trauma program (four speakers) on Wednesday, March 19.
2. The Michigan Heart Association, sponsor of the heart and rheumatic fever program (seven speakers) on Thursday, March 20.
3. The Michigan Foundation for Medical and Health Education, Inc., sponsor of Laurence W. Kinsell, M.D., of Oakland, California, the Foundation Lecturer.
4. The Michigan Cancer Co-ordinating Committee, sponsor of G. N. Papanicolaou, M.D., of New York City, the MCCC Lecturer.
5. Smith, Kline and French Laboratories, Philadelphia, for sponsorship of the closed circuit color television program beamed to the MCI meeting room; and Detroit's Henry Ford Hospital and its medical staff for co-operation in arranging and producing the three-days TV scientific presentations.
6. The American Cyanamid Company, Surgical Products Division, Danbury, Conn., for sponsorship of the color motion pictures shown during the MCI in the Normandie Room, Sheraton-Cadillac Hotel.
7. Schering Corporation of Bloomfield, New Jersey, for sponsoring the Wednesday evening Symposium on the Phrenotropic Drugs.
8. Mead Johnson and Co. of Evansville, Indiana, and Michigan State Medical Society—co-sponsors of the Conference for Residents, Interns and Senior Medical Students.
9. The Michigan State Pharmaceutical Association for sponsoring the testimonial luncheon honoring the Pharmaceutical Lecturer.
10. Michigan Medical Service, for contributing notepads for use of MCI registrants.

COMMITTEE ON ARRANGEMENTS

Representing Michigan State Medical Society
C. E. Umphrey, M.D., Detroit, General Chairman
G. W. Slagle, M.D., Battle Creek, President, MSMS
Arch Walls, M.D., Detroit, Immediate Past President, MSMS
L. Fernald Foster, M.D., Detroit, Secretary, MSMS

Representing University of Michigan School of Medicine and University of Michigan Department of Postgraduate Medicine
M. R. Abell, M.D., Ann Arbor
B. D. Graham, M.D., Ann Arbor
H. A. Towsley, M.D., Ann Arbor
A. B. Via, M.D., Ann Arbor

Representing Wayne County Medical Society and Wayne University College of Medicine
M. L. Lichter, M.D., Melvindale
J. W. Sigler, M.D., Detroit
M. M. Taylor, M.D., Grosse Pointe
R. K. Whiteley, M.D., Detroit

Representing Out-State Practitioners, Members of MSMS
E. J. Kulinski, M.D., Bay City
F. H. Lindenfeld, M.D., Niles
E. A. Oakes, M.D., Manistee
E. S. Oldham, M.D., Breckenridge
D. G. Pike, M.D., Traverse City
S. B. Winslow, M.D., Battle Creek
P. S. Sloan, M.D., Houghton
Charles Ten Houten, M.D., Paw Paw

Representing Michigan Department of Health and Michigan Health Officers Association
A. E. Heustis, M.D., Lansing
J. D. Monroe, M.D., Pontiac

Representing Michigan Foundation for Medical and Health Education
E. I. Carr, M.D., Lansing

Representing Michigan Heart Association
F. D. Johnston, M.D., Ann Arbor

Representing American College of Surgeons Regional Committee on Trauma
H. M. Smathers, M.D., Detroit

Representing Michigan Cancer Co-ordinating Committee
H. M. Nelson, M.D., Detroit

COMMITTEE ON PROGRAM

B. E. Brush, M.D., Detroit, Chairman
H. A. Furlong, M.D., Pontiac
W. M. LeFevre, M.D., Muskegon
W. S. Reveno, M.D., Detroit
H. A. Towsley, M.D., Ann Arbor
Paul deKruif, PhD., Advisor, Holland

COMMITTEE ON COLOR TELEVISION PROGRAM

B. E. Brush, M.D., Detroit, Chairman
Mr. R. A. Reath, Philadelphia, Pa.
J. W. Logie, M.D., Grand Rapids
J. L. Ponka, M.D., Detroit
E. L. Quinn, M.D., Detroit
H. A. Towsley, M.D., Ann Arbor
J. M. Wellman, M.D., Lansing

HOTEL RESERVATIONS

MICHIGAN CLINICAL INSTITUTE

Detroit, March 19-20-21, 1958

The reservation blank below is for your convenience in making your hotel reservation in Detroit. Please send your application to B. Van De Keere, Assistant Sales Manager, Sheraton-Cadillac Hotel, Detroit 31, Michigan. Mailing your application now will be of material assistance in securing hotel accommodations.

As very few singles are available, registrants are requested to co-operate with the Committee on Hotels by sharing a room with another registrant, when convenient.

Committee on Hotels
Michigan Clinical Institute
c/o Sheraton-Cadillac Hotel
Detroit 31, Michigan
Attention: B. Van De Keere

Please make hotel reservation(s) as indicated below:

.....Single Room(s)
.....Double Room(s) for.....persons
.....Twin-Bedded Room(s) for.....persons
Arriving March .....hour.....A.M.....P.M.....
Leaving March .....hour.....A.M.....P.M.....
Hotel of First Choice: .....
Second Choice: .....

Names and addresses of all applicants including person making reservation:

Name	Address	City	State
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Date ..... Signature .....
Address ..... City .....

Michigan Clinical Institute, 1958

C. E. UMPHREY, M.D.

C. E. UMPHREY, M.D., Detroit, General Chairman of Arrangements for the 1958 Michigan Clinical Institute, Detroit. Doctor Umphrey is a Past President of the Michigan State Medical Society

Tentative Program

H. T. BAHNSON, M.D.

WEDNESDAY, MARCH 19, 1958

A.M.

7:30 REGISTRATION — Top of stairs, Fifth Floor, Sheraton-Cadillac Hotel

8:15 EXHIBITS OPEN—Fourth Floor, Sheraton-Cadillac Hotel

FIRST ASSEMBLY

Grand Ballroom, Sheraton-Cadillac Hotel

Chairman: H. K. RANSOM, M.D., Ann Arbor
Secretary: N. J. HERSHEY, M.D., Niles

8:20 WELCOME

G. W. SLAGLE, M.D., Battle Creek
President, Michigan State Medical Society

L. J. BAILEY, M.D., Detroit
President, Wayne County Medical Society

F. A. COLLER, M.D.

SURGERY-CANCER CONTROL

8:30 "Open Heart Surgery"

HENRY T. BAHNSON, M.D., Baltimore, Maryland
Associate Professor of Surgery, Johns Hopkins Hospital

9:00 "Relationship of Colonic Polyps to Cancer of the Colon"

FREDERICK A. COLLER, M.D., Ann Arbor

9:20 "The Diagnosis and Management of Intestinal Obstruction in the Newborn and Infant"

CLIFFORD D. BENSON, M.D., Detroit

Associate Professor of Surgery, Wayne State University College of Medicine; Associate Chief of Surgery, Children's Hospital; Surgeon, Harper Hospital

Intestinal Obstruction in the newborn and infants still comprises one of the most common surgical lesions. Early and accurate diagnosis is still probably the most important factor in the survival of these infants. The diagnostic features of the important lesions will be discussed and the present-day management will be emphasized. During the past five years the technical aspects of managing intestinal obstruction in the newborn and infant has brought forth much progress and this is reflected in a decreased morbidity and mortality rate. The lesions to be discussed are: Atresias at the various levels of the gastro-intestinal tract, stenosis, malrotation and other congenital abnormalities of the gastro-intestinal tract, including megacolon or Hirschsprung's disease.

C. D. BENSON, M.D.

9:40 "The Blues in Medicine"

L. FERNALD FOSTER, PH.B., M.D., Detroit
Secretary, Michigan State Medical Society; President, and Medical Executive Administrator, Michigan Medical Service

In résumé, it should encompass the story of prepayment insurance—The Past—The Challenge of the Twenties and Thirties—The Present and—The Future.

The basic thought is the objective of providing all the people with the best medical care at a price their economy will permit and to achieve this objective through the operation of the American Free Enterprise System.

L. F. FOSTER, M.D.

10:00 INTERMISSION TO VIEW EXHIBITS

11:00 THE MICHIGAN FOUNDATION FOR MEDICAL AND HEALTH EDUCATION LECTURE

"Aging—Decay or One Hoss Shay"

LAURANCE W. KINSELL, M.D., Oakland, California
Director, Institute for Metabolic Research, Highland Alameda County Hospital

Birth, puberty, climacteric, death. All of these are manifestations of the cosmic time clock in each individual life span.

Research in the field of geriatrics and gerontology must be directed toward understanding of this time clock mechanism (the *physiology* of aging), as well as toward understanding and prevention of the *pathology* of aging, with particular reference to atherosclerotic cerebral vascular disease.

Indefinite postponement of death would seem to be neither feasible nor desirable. The absence of one living human past the age of 150 attests to the unfeasibility. A consideration of the simplest sort of arithmetic attests to the undesirability. Within a few generations of the beginning of unlimited survival, all the untenanted space on this globe would have disappeared.

No better example of the "one hoss shay approach" to living and dying has been afforded us in our generation than by Justice Oliver Wendell Holmes, a man witty, active, interested in all about him, almost to the day of his death. No sadder manifestation of the "decay" approach to aging confronts us than a respected pater familias, who, as the result of progressive atherosclerosis of the cerebral vessels, becomes a trial to himself and to all about him—a doddering, forgetful caricature of his former self.

Is prevention of senescence feasible and desirable? There can be only a positive answer to the desirability. If, as seems most probable, impaired arterial blood supply is the major factor responsible for senility, prevention is feasible and may well be completely in hand before the passing of a decade. The facts and some of the theory relating to this will be discussed with you.

L. W. KINSELL, M.D.

11:30 THE MICHIGAN CANCER CO-ORDINATING COMMITTEE LECTURE

"Cytology and the General Practitioner—What the General Practitioner Can Gain from the New Method"

CYRUS C. ERICKSON, M.D., Memphis, Tennessee

12:00 End of First Assembly

Luncheon

P.M.

1:00 COLOR TELEVISION PROGRAM, beamed to the Grand Ballroom, Sheraton-Cadillac Hotel through the co-operation of the staff of Henry Ford Hospital, Detroit and Smith, Kline and French Laboratories of Philadelphia

2:30 End of Television Program

2:30 INTERMISSION TO VIEW EXHIBITS

SECOND ASSEMBLY

Grand Ballroom, Sheraton-Cadillac Hotel
Chairman: E. J. LAURETTI, M.D., Muskegon
Secretary: A. H. ULMER, M.D., Port Huron

TRAUMA

3:20 "Present Status of Intervertebral Disc Surgery"
ALEXANDER T. AITKEN, M.D., Brookline, Massachusetts

3:50 "Injury Reduction by Identification of the Accident Prone Worker"

KERMIT T. JOHNSTONE, M.D., Saginaw
Medical Director, Saginaw Plant, Central Foundry Division, General Motors Corporation

A significant reduction of 33.2 per cent has been achieved between 1954 and 1957 in a malleable iron foundry.

This has followed the identification of certain individuals as "Accident Prone." This is accomplished by comparing the

K. T. JOHNSTONE, M.D.

W. W. Glas, M.D.

number of injuries each employe experiences in a two-month period with the number of expectable on a basis of plant-wide performance.

The men that exceed this are interviewed at the time to determine the underlying causes. These interviews have: (1) brought to light unsuspected job hazards which are correctable, and (2) indicated certain individuals that have personality problems.

In some cases, the man's attitude toward his work can be improved; and in others, a more suitable job assignment can be arranged.

P. A. Wade, M.D.

4:10 "Postoperative Care of the Multiple-Injury Patient"
Wayne W. Glas, M.D., Eloise
Director of Surgery, Wayne County General Hospital, Eloise; Instructor in Surgery, University Hospital, Ann Arbor; Consultant to Veterans Administration Hospital, Ann Arbor; Surgical Consultant at Oak Ridge Institute of Nuclear Studies, Oakridge, Tenn.

4:30 "Fractures of the Femur"
Preston A. Wade, M.D., New York City
Professor of Clinical Surgery, Cornell University Medical College; Attending Surgeon, New York Hospital; Chairman, Fracture Clinic (combined) New York Hospital-Hospital Special Surgery; Chairman, Committee on Trauma, American College of Surgeons

5:00 End of Second Assembly

5:00 DISCUSSION CONFERENCE
Grand Ballroom, Sheraton-Cadillac Hotel
Leader: Carl E. Badgley, M.D., Ann Arbor
Participants: All guest essayists of the day (indicated above) will participate.

5:30 End of Discussion Conference

R. W. Waggoner, M.D.

F. J. Braceland, M.D.

WEDNESDAY, MARCH 19, 1958

THIRD ASSEMBLY

Grand Ballroom, Sheraton-Cadillac Hotel

8:00 to 10:00 p.m. SYMPOSIUM ON THE PHRENOTROPIC DRUGS
Moderator: Raymond W. Waggoner, M.D., Ann Arbor
Director, The Neuropsychiatric Institute, University Hospital

Participants:

"Phrenotropic Drugs in Mental Illness"
Francis J. Braceland, M.D., Hartford, Connecticut
Psychiatrist-in-Chief, Institute of Living

"Pharmacological Aspects of the Phrenotropic Drugs"
Edward F. Domino, M.D., Ann Arbor
Assistant Professor of Pharmacology, University of Michigan

Phrenotropic drugs comprise a heterogeneous group of substances which have markedly different pharmacological properties. Various attempts have been made to categorize these agents on a psychiatric, pharmacological, and chemical basis. None of these classifications are fully satisfactory because of our relatively meager knowledge of brain function. One group of phrenotropic drugs, the tranquilizers, will be discussed in detail to illustrate this point. Some of the more probable sites and mechanisms of action of agents like reserpine, chlorpromazine, meprobamate and others will be described. The similarities or differences of these agents to various sedative-hypnotics like phenobarbatal, or ethyl alcohol and their clinical implications will be pointed out.

"Clinical Aspects of the Phrenotropic Agents"
H. Houston Merritt, M.D., New York City
Professor of Neurology and Psychiatry, Columbia University, New York College of Physicians and Surgeons; Past President, American Neurological Association

* * *

So much interest in drugs affecting the mind has developed in the past few years that the Program Committee considered it appropriate to present this up-to-the-minute symposium on the ataratic or tranquilizing

E. F. Domino, M.D.

drugs and the euphoriant drugs as an official part of the 1958 Michigan Clinical Institute.

Schering Corporation of Bloomfield, New Jersey, is sponsoring the complete program as well as a reception for doctors of medicine and their guests. The reception will be held immediately after the symposium.

THURSDAY, MARCH 20, 1957

A.M.

8:15 REGISTRATION—Top of stairs, Fifth Floor

EXHIBITS OPEN—Fourth Floor

FOURTH ASSEMBLY

NINTH ANNUAL MICHIGAN HEART DAY

Sponsored by Michigan Heart Association

Grand Ballroom, Sheraton-Cadillac Hotel

Chairman: M. S. CHAMBERS, M.D., Flint
Secretary: S. E. CHAPIN, M.D., Dearborn

HEART AND RHEUMATIC FEVER

8:30 Panel on "PERIPHERAL VASCULAR DISEASE"

Moderator: EDGAR V. ALLEN, M.D., Rochester, Minnesota
Senior Consultant in Medicine, Mayo Clinic; Professor of Medicine, University of Minnesota; Past President, American Heart Association

Participants:

WALTER L. ANDERSON, M.D., Detroit
Instructor of Clinical Medicine, Wayne State University College of Medicine; In Charge of Peripheral Vascular Clinic, Harper and Receiving Hospital, Out-Patient Department

SIBLEY W. HOOBLER, M.D., Ann Arbor
Associate Professor of Internal Medicine, University of Michigan Medical School

EUGENE A. OSIUS, M.D., Detroit
Chief, Department of Surgery and Vice Chief of Staff, Harper Hospital

D. EMERICK SZILAGYI, M.D., Detroit
Surgeon-in-charge of Section in General Surgery, Henry Ford Hospital

10:00 INTERMISSION TO VIEW EXHIBITS

11:00 "Rheumatic Fever"

CHARLES H. RAMMELKAMP, M.D., Cleveland, Ohio
Professor of Medicine, Western Reserve University; Director of Medicine, Cleveland City Hospital

11:30 "Digitalis Intoxication"

HARPER K. HELLEMS, M.D., Detroit
Associate Professor of Medicine, Wayne State University College of Medicine; Director, Cardiovascular Research, City of Detroit Receiving Hospital

While the digitalis preparations are one of the most important therapeutic methods in treating congestive heart failure, their improper use can produce a deleterious effect on cardiac function. Regardless of the preparation used, it is necessary that the patient be titrated to obtain a maximal therapeutic effect without toxic manifestations. The relationship of the potassium and calcium ions to digitalis effect are becoming increasingly apparent both in the inherent action of digitalis on cardiac function and in relation to cardiac toxicity of the drug.

This presentation will deal with the methods of digitalizing a patient, the clinical recognition of intoxication, and the methods of reversing such intoxication when it occurs, with the emphasis on the above relationships between electrolytes and digitalis action.

11:50 End of Fourth Assembly

Luncheon

E. V. ALLEN, M.D.

W. L. ANDERSON, M.D.

S. W. HOOBLER, M.D.

E. A. OSIUS, M.D.

D. E. SZILAGYI, M.D.

C. H. RAMMELKAMP, M.D.

H. K. HELLEMS, M.D.

W. S. Reveno, M.D.

R. W. Monto, M.D.

G. H. Lowrey, M.D.

I. Snapper, M.D.

H. A. Howes, M.D.

P.M.

1:00 COLOR TELEVISION PROGRAM, beamed to the Grand Ballroom, Sheraton-Cadillac Hotel through the co-operation of the staff of Henry Ford Hospital, Detroit and Smith, Kline and French Laboratories of Philadelphia

2:30 End of Television Program

2:30 INTERMISSION TO VIEW EXHIBITS

FIFTH ASSEMBLY

Grand Ballroom, Sheraton-Cadillac Hotel

3:15 STEROIDS PANEL

Moderator: Wm. S. Reveno, M.D., Detroit

Clinical Associate Professor of Medicine, Wayne State University College of Medicine; Attending Physician, Harper and Detroit Receiving Hospitals

Participants:

"The Use of Adrenocorticosteroids and Corticotrophin in the Management of Hematological Disorders"

Raymond W. Monto, M.D., Detroit

Physician-in-Charge, Division of Hematology, Henry Ford Hospital

The adrenocorticosteroids and corticotrophin (ACTH) have wide therapeutic application in a variety of hematologic disorders. The immunohematologic diseases which include "idiopathic" thrombocytopenic purpura, acquired hemolytic anemia, and splenic neutropenia are generally classified under the category of hypersplenism. The course of each of these diseases is favorably influenced by the steroids and in many instances their application constitutes specific therapy.

The usefulness of these newer agents has been well established in the management of patients with acute and chronic leukemia, as well as in the disseminated lymphomas. Of specific interest is the ability of adrenocorticosteroids and ACTH to increase the vascular integrity in certain vascular hemorrhagic disorders and the thrombocytopenics.

While the mechanism of action of these hormones in disturbances of the hematopoetic system is not clearly understood, they nevertheless represent a major modality of therapy.

"Steroids in Pediatrics"

George H. Lowrey, M.D., Ann Arbor

Associate Professor of Pediatrics and Communicable Diseases, University of Michigan Medical School

"Osteoporosis"

Isidore Snapper, M.D., New York City

"The Use of Steroids in the Treatment of Allergic Conditions"

Homer A. Howes, M.D., Detroit

Physician, Harper Hospital; Attending Consultant, Veterans Administration Hospital, Dearborn; Assistant Clinical Professor of Medicine, Wayne State University

At the present time, there are available for clinical use various preparations of ACTH and cortico-steroids. The indications and contra-indications for their use in allergic conditions will be discussed, as well as the choice of preparation, required doses, and expected results. Also, necessary safeguard and untoward effects for which to be on the look-out will be reviewed.

An analysis of a series of cases treated with steroids will be made, with emphasis on certain special problems encountered.

4:30 Questions and Answers

5:00 End of Fifth Assembly

5:00 DISCUSSION CONFERENCE—Grand Ballroom

Leader: Gordon B. Myers, M.D., Detroit

Participants: All guest essayists of the day (indicated above) will participate

5:30 End of Discussion Conference

No Michigan Clinical Institute Meeting Thursday Evening

FRIDAY, MARCH 21, 1957

A.M.

8:15 **REGISTRATION—Top of stairs, Fifth Floor**
EXHIBITS OPEN—Fourth Floor

C. L. RANDALL, M.D.

SIXTH ASSEMBLY

Grand Ballroom, Sheraton-Cadillac Hotel

Chairman: D. W. THORUP, M.D., Benton Harbor
Secretary: T. J. TRAPASSO, M.D., Sault Ste. Marie

OBSTETRICS-GYNECOLOGY-PEDIATRICS

8:30 **"The Investigation and Treatment of Infertility"**
CLYDE L. RANDALL, M.D., Buffalo, New York
Professor of Obstetrics-Gynecology, University of Buffalo; Chief, Department of Obstetrics-Gynecology, Buffalo General Hospital

Failure to conceive, while at first only disturbing, may become frustrating and eventually an obsession. Prospective parents may exhibit the same progression of tension if pregnancies result only in abortion or loss of the child as success seems assured. When sterility seems apparent, an orderly investigation is reassuring and the measures employed not infrequently seem to have been of therapeutic value. When fetal loss has occurred, investigative measures seem of little therapeutic value but treatment when indicated seems most effective when employed before conception is again evident.

J. PARKS, M.D.

9:00 **"The Management of the Toxemias of Pregnancy"**
JOHN PARKS, M.D., Washington, D. C.
Professor of Obstetrics and Gynecology; Dean of the School of Medicine, George Washington University

The exact cause of pregnancy toxemia remains unknown. The basic pathologic change in the mother is vasospasm. The degree of vasospasm usually increases gradually in the latter weeks of pregnancy. Tissue edema accompanies vasospasm. Hypertension is characterized first by a rise in the diastolic followed by an increase in the systolic blood pressure. The patients' warning signals of toxemia are: rapid weight gain, followed by headache, visual disturbances, epigastric distress, irritability, and occasionally convulsions. Proteinuria is usually a late sign of pregnancy toxemia.

There are three features in the management of the toxemias of pregnancy: prevention, palliation, and emergency treatment.

Preventive measures consist of careful prenatal observation of weight gain, blood pressure, eye grounds and urinalysis in the latter weeks of pregnancy. Usually, severe toxemia can be prevented by reduction in sodium intake, by fluid elimination using mild purgatives or diuretics, and by adequate evaluation and correction of emotional components.

The one purpose of palliative treatment is to prolong pregnancy and prevent fetal premature delivery. With the use of low sodium, high protein, high vitamin food intake, diuretics, sedation and antispasmodic or hypotensive drugs pregnancy may be prolonged with benefits to the fetus and without danger to the mother.

Emergency treatment involves various methods of dealing with fetal distress, convulsive states, pulmonary congestion, and cardiac failure in the mother with toxemia of pregnancy. Toxemia of pregnancy is one of the truly reversible hypertensive diseases occurring in early life. It is *almost* a preventive disease.

C. A. SMITH, M.D.

9:30 **"Everyday Psychotherapy in Gynecology"**
HERBERT T. SCHMALE, M.D., Ann Arbor

9:50 **"Problems of the Newborn"**
CLEMENT A. SMITH, M.D., Boston, Massachusetts
Associate Professor of Pediatrics, Harvard Medical School

10:20 **INTERMISSION TO VIEW EXHIBITS**

11:10 **"Treatment of Purulent Meningitis"**
PAUL V. WOOLLEY, M.D., Detroit
Professor of Pediatrics, Wayne State University College of Medicine

P. V. WOOLLEY, M.D.

W. W. WALLACE, M.D.

11:30 "Clinical Recognition of Fluid and Electrolyte Disorders in Infancy"

WM. M. WALLACE, M.D., Cleveland, Ohio

Gertrude Lee Chandler Tucker, Professor of Pediatrics; Chairman of the Department, Western Reserve University School of Medicine, Department of Pediatrics; Director, Babies and Children's Hospital

Advances in clinical laboratory techniques in the past decade have led to undue emphasis on characterization of status of electrolyte and fluid unbalance in terms of ionic concentrations in the body fluids. While the utilization of such techniques are important and often required for definitive diagnosis and guidance of therapy, it is essential that the primary importance of clinical observation should not be forgotten. Optimally, the use of chemical analyses should follow, not precede, accurate clinical diagnosis.

The types of fluid and electrolyte deficits and the disturbances of acid-base balance peculiar to infancy will be discussed in terms of history and symptomatology and the chemical and therapeutic correlations of the more important ones pointed out.

12:00 End of Sixth Assembly
Luncheon

P.M.

1:00 COLOR TELEVISION PROGRAM, beamed to the Grand Ballroom, Sheraton-Cadillac Hotel through the co-operation of the staff of Henry Ford Hospital, Detroit and Smith, Kline and French Laboratories of Philadelphia

2:30 End of Television Program

2:30 INTERMISSION TO VIEW EXHIBITS

Attention
General
Practitioners

ALL
PRESENTATIONS
on the
1958
MCI
Program
are
beamed
to the
GENERALIST!

SEVENTH ASSEMBLY

Grand Ballroom, Sheraton-Cadillac Hotel

Chairman: J. W. RICE, M.D., Jackson
Secretary: G. E. MILLARD, M.D., Detroit

"YESTERDAY'S HOPELESS—NOW CURABLE!"

3:00 Pharmaceutical Lecturer
FRANCIS BROWN, Bloomfield, New Jersey
President, Schering Corporation

3:30 (Subject to be announced)
HOWARD D. FABING, M.D., Cincinnati, Ohio

4:00 (Subject and speaker to be announced)

4:30 (Subject to be announced)
MARION B. SULZBERGER, M.D., New York City

5:00 End of Seventh Assembly

5:00 DISCUSSION CONFERENCE—Grand Ballroom
Leader: PAUL DE KRUIF, Ph.D., Holland
Participants: All guest essayists of the day (indicated above) will participate

5:30 End of Discussion Conference and the 1958 Michigan Clinical Institute

Michigan's Department of Health

Albert E. Heustis, M.D., Commissioner

THE JOY OF LISTENING

"The Joy of Listening" is the latest in a series of documentary type movies being produced by the Michigan Department of Health. The series is aimed primarily at interpreting the services of the department whose success depends a great deal upon public understanding and participation.

The new film portrays a hearing conservation program typical of those carried on in Michigan through the co-operation and combined facilities of local health departments, medical societies, public and parochial schools and the Michigan Department of Health. Following a community hearing conservation project step by step, the movie opens up with the preliminary hearing screening of a third-grade classroom by a hearing screening technician hired locally and trained by the Michigan Department of Health. She checks all of the pupils at one time through the use of a group screening audiometer.

The film then singles out and follows three children who are picked up in the group screening. These children have their hearing evaluated further by a threshold screening technician who does an individual audiogram for each child. Following this, an audiologist from the Michigan Department of Health may do further tests to evaluate hearing losses a little further. Because all three have significant hearing losses they are referred for examination by an ear specialist in a clinic sponsored by the state and local health departments and the local medical society. Parent attendance at the otological examination is emphasized as essential if they are to understand the importance of the recommendation made by the physician.

The parents of the three children then consult their own physician regarding treatment recommended at the otological clinic. A copy of the hearing evaluation and the otological report are sent to the physician. Experience has shown that at least seven out of every ten children with hearing losses can have their hearing restored or greatly improved with prompt medical attention. In others, the hearing defect can usually be prevented from getting worse and, with the aid of special education, a better adjustment to the hearing handicap can be made.

The three children in the film each represent a different type of hearing loss. One, whose hearing loss is a result of foreign matter obstructing the ear, has his hearing restored after the obstruction is removed. The second, with a moderate hearing loss in one ear, is helped simply by moving her to the front of the room. The third, whose hearing loss is severe and irreversible, is given special help in a hearing clinic.

In the hearing conservation programs, local health department nurses help to interpret the child's needs to the parents and the department works with the community agencies and the Crippled Children Commission to assist needy children in getting medical care. As the film shows, even the child with a permanent handicapping hearing loss can be helped by a variety of state and local organizations interested in the problem.

Running time of the black and white sound film is thirteen minutes which makes it easily adaptable for local television stations programming. "The Joy of Listening" is available upon request from the Film Loan Library of the Michigan Department of Health.

CHILDREN GET SUMMER FLUORIDE PROTECTION

For the tenth consecutive summer, topical fluoride programs for children three to thirteen years of age were sponsored by the Michigan Department of Health in co-operation with local communities asking the service. A total of 35,000 boys and girls took part in the 1957 programs throughout the state. Over the ten-year period, 185,000 children have been given this protection during vacation days.

As in the past, senior dental students and dental hygiene students did the work, supervised by local dentists. A total of fifty-nine students took part, working in 173 centers in forty-five counties. To make the programs self-supporting, a small fee was charged for children who could afford to pay.

In many communities, the summer topical fluoride schedules supplement the year-around program. The topical application method of giving children the protection of fluoride functions in communities too small for a public water supply or where a supply lacks the one part per million of fluoride that safeguards against tooth decay. The method is slightly more than half as effective as the fluoridation of water, which reduces decay by approximately 60 per cent.

A deeper knowledge of cancer, far from accentuating the fear inspired by the disease, is the best means of allaying it.

* * *

An incomplete diagnosis or reliance on inadequate methods of treatment has often resulted in loss of opportunity for early and better care.

* * *

A cancer that has been meddled with is more dangerous.

In Memoriam

Noah E. Aronstam, M.D., eighty-six, Detroit physician, died September 30, 1957. Born in Latvia, Doctor Aronstam came to Detroit in 1892 and graduated from the Michigan College of Medicine six years later.

Doctor Aronstam began practicing medicine in 1898 and continued in Detroit without interruption until his retirement last year.

An authority on diseases of the skin, Doctor Aronstam served as a professor of dermatology and urology at his alma mater and authored hundreds of articles in medical journals on these subjects. He was a strong advocate of premarriage examinations.

Doctor Aronstam was a pioneer in the Zionist movement in Detroit and played a prominent role in the founding of the Detroit Philosophical Society. Known primarily as a physician, he was also, author, teacher, poet, scientist and philosopher. His five published books included a study of Spinoza.

Harry J. Defnet, M.D., sixty-seven, Escanaba physician and surgeon, died October 1, 1957. Born in Lincoln, Wisconsin, August 25, 1890, and moving to Escanaba at an early age, Doctor Defnet began his medical career at the Detroit College of Medicine, 1909-16. He was affiliated with Nu Sigma Nu fraternity.

He volunteered for service in World War I, served with the 106th Field Ambulance of the British Expeditionary Forces in France from April, 1916; was a member of the U. S. Army Medical Corps, 35th Division until June, 1919. Retiring from the service with the rank of Captain, he set up a practice of general medicine and surgery in Escanaba.

Doctor Defnet was an adult leader in the Boy Scouts and was a former Escanaba city Health Officer.

Clarence L. Hathaway, M.D., eighty-three, Oakland County physician for more than half a century, died October 25, 1957.

Doctor Hathaway was born in Oakland County, graduated from the old Michigan College of Medicine and Surgery in 1903 and practiced medicine in the Lake Orion area until his retirement in 1955. During World War I, he served as a Captain in the Army Medical Corps.

Augustus Holm, M.D., eighty-five, practiced medicine in LeRoy for over fifty years, until his retirement five years ago.

Born in Smaland, Sweden, 1872, and coming to the U.S. in 1889, he attended public schools in Decatur, Michigan, and was graduated from the University of Michigan medical school in the year 1901.

Death occurred September 15, 1957.

Lafon L. Jones, M.D., seventy-two, Flint pediatrician, died October 1, 1957.

Born in Louisville, Kentucky, January 20, 1885, he attended high school there and earned a bachelor of science degree from Princeton University in 1905. In 1914, he received a doctor of medicine degree at the University of Michigan and that same year started his practice in Sebewaing.

Doctor Jones moved to Flint and opened practice in July, 1918. With interest developed in his work as city and school physician, he started specializing in the practice of pediatrics in 1920.

He devoted a good share of his time to voluntary service in the community. Active in the Michigan's Children's Aid Society, he was president of the organization's board of directors in 1938, and in 1944 was named to its board of trustees.

Doctor Jones was one of three medical advisors of the Clare Elizabeth Fund for Maternal Health, having served continually since its beginning in 1939. He attended every monthly meeting and was one of the strongest advocates for improvement in health education.

In December, 1954, he resigned after serving twenty-eight years as Chief of the Pediatrics section at Hurley Hospital.

The following excerpt from the *Flint Journal* expresses his typical physician's devotion:

"Although a truly humble man, never seeking publicity and always letting it be known he had no desire for recognition, he couldn't escape one of his warmest tributes.

Sixty mothers who wanted to show their appreciation at Christmas time for his work with their children, gave him a gold wrist watch inscribed, "To Our Beloved Doctor Lafon Jones, Christmas 1953, From Your Children." The mothers wanted to arrange a testimonial dinner, but with characteristic modesty he vetoed the plan. It even was difficult to persuade him to consent to a newspaper photograph of the watch presentation. He said he feared it might be construed as promotional."

Doctor Jones was a member of the American Academy of Pediatrics, Flint Golf Club and the Elks.

* * *

Lee E. Kelsey, M.D., seventy-seven, Lakeview physician and founder of Kelsey Hospital, Lakeview, died in October, 1957.

The Montcalm County community's twenty-six-bed hospital was founded in 1908. This year provision was made to make it a community hospital, operating under a board of trustees.

Doctor Kelsey was a University of Michigan Medical School graduate and had practiced medicine for fifty-three years.

Harry C. Kurtz, M.D., forty-five, Grosse Pointe Park anesthesiologist, died October 19, 1957.

Doctor Kurtz was a graduate of the Ohio State College of Medicine and for the past eight years was on the staff of Deaconess Hospital.

Omer Guy McFarland, M.D., seventy-four, of North Adams, died October 11, 1957.

Doctor McFarland, Hillsdale County's oldest prac-

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ticing physician, had been North Adams's only physician for thirty-seven years.

A native of Redkey, Indiana, he attended Purdue University Medical School where he graduated in 1906. He interned at Fort Wayne, Indiana, and practiced in Indiana and Nebraska before coming to Hillsdale County in 1913. He spent seven years in Montgomery before moving to North Adams in 1920.

Doctor McFarland was a former president of the Montgomery Bank and a director of the Hillsdale National Bank at the time of his death.

Ralph A. Poirier, M.D., forty, Detroit physician, died September 28, 1957. Dr. Poirier was an active member of Wayne County Medical Society and of the Michigan State Medical Society.

John W. Purdy, M.D., seventy-nine, of Alpena, died October 4, 1957.

Doctor Purdy was born August 17, 1878, near London, Ontario, Canada. He came to Alpena County in 1902, settling in Long Rapids, after his graduation from the Saginaw Valley Medical College.

In 1904, he lost his vision as the result of cataracts but continued to practice medicine, and was active until the time of his death. He was Alpena's oldest practicing physician.

Carl S. Ratigan, M.D., sixty-three, Dearborn surgeon, died September 23, 1957.

A native of Detroit, Doctor Ratigan was a graduate of the University of Detroit and received his medical degree in 1919 at Wayne University College of Medicine.

He was the first Chief of Staff at Oakwood Hospital, a member of the first hospital commission in Dearborn, and was named by the *Dearborn Press* in 1952 as one of its "Citizens of the Year."

Doctor Ratigan was a fourth degree Knight of Columbus, belonged to the Exchange Club, and was a charter member of the Detroit Yacht Club.

John E. Vanderlaan, M.D., forty-one, Muskegon, was killed in an airplane accident, September 27, 1957, in the State of Washington.

A native of Muskegon, Doctor Vanderlaan received his education at Muskegon Junior College, a bachelor's degree from Hope College in 1936. He graduated cum laude from Harvard University Medical School and then entered the University of Chicago clinics where he interned in surgery and internal medicine.

An avid private flyer, he was an active member of the Muskegon Aeroter, Aero Club of Michigan and was president of that organization.

* * *

Wayne L. Whitaker, Ph.D., fifty-three, Ann Arbor, Assistant Dean of the University of Michigan Medical School, died September 29, 1957.

Professor Whitaker's major interest and activity in recent years had been in the equitable and effective

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selection of medical students and the encouraging of qualified high school students in Michigan to work toward a medical education.

A native of Putnamville, Indiana, he took his undergraduate work at DePauw University. Following graduation in 1926, he was assistant pastor of the First Methodist Church in Elkhart, Indiana. In 1928, he became assistant director of Lawrence Hall, a home for dependent boys in Chicago. In 1932, he entered the graduate school at the University of Michigan and received his master's degree in 1934.

He received his Ph.D. degree from the University of Michigan in the field of zoology in 1939. He was promoted to assistant professor in 1943, associate professor in 1949 and professor in 1956.

Professor Whitaker made a noteworthy contribution in the field of cancer chemotherapy research, volunteering himself as a subject for experiments during the length of his illness.

Among his national professional activities, Professor Whitaker was a member of the American Association of Anatomists, Sigma Xi professional scientific fraternity, the Scientific Research Club (president 1954-1955), the Committee for the Evaluation of the Medical Student of the Association of American Medical Colleges, the Michigan State Board of Registration in Medicine Screening Board for Foreign Doctors, and the Detroit Interracial Study Committee.

Among his responsibilities at the University of Michigan, he was a member of the Barbour Scholarship Committee for Foreign Students, Executive Committee of the University of Michigan Medical School, the University of Michigan Committee on College Relations, and chairman of the Student Research Fellowships Committee.

TREATMENT OF SYPHILIS, CHANCROID, AND OTHER VENEREAL DISEASES

(Continued from Page 1516)

Erythromycin are also effective. Penicillin is not effective and should not be used.

Lymphogranuloma Venereum.—Treatment is unsatisfactory. Sulfonamides as used in Chancroid are fairly effective but prolonged treatment is usually necessary. Treatment of choice is Tetracyclines ¼ to ½ gram Q.I.D. according to tolerance for a total dosage of 30 to 60 grams.

Granuloma Inguinale.—Tetracyclines ¼ to ½ gram Q.I.D. for a total dose of 20 to 60 grams according to tolerance and response. For hospitalized cases Streptomycin 1 gram q6h for five to ten days (20 to 40 grams). Where Tetracyclines are not available for ambulatory treatment Antimony compounds may be substituted.

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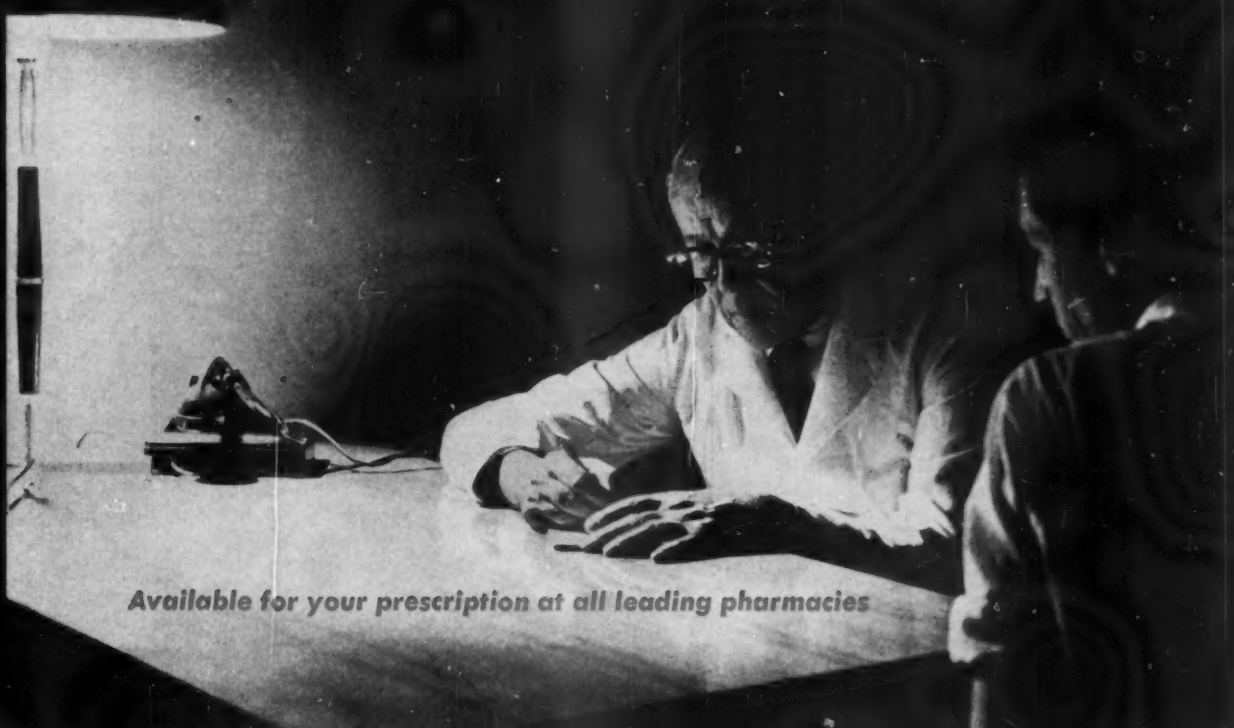

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. . . . . NEWS MEDICAL

MICHIGAN AUTHORS

John M. Dorsey, M.D., Detroit, is the author of an article entitled "Living Education," published in the April and May issues of *Michigan Educational Journal,* 1957.

Harry A. Pearse, M.D., and **J. David Trisler, M.D.,** Detroit, are the authors of an article entitled "A Rational Approach to the Treatment of Habitual Abortion and Menometrorrhagia," published in *Clinical Medicine,* September, 1957.

William S. Carpenter, M.D., F.A.C.S., and **Paul J. Connolly, M.D., F.A.C.S.,** Detroit, are the authors of an article entitled "Chronic Ulcerative Colitis," published in *Clinical Medicine,* October, 1957.

Martin J. Urist, M.D., South Haven, is the author of an article entitled "Bilateral Blepharospasm," published in A.M.A. *Archives of Ophthalmology,* October, 1957.

Earl G. M. Krieg, M.D., Detroit, is the author of an article entitled "Regional Enteritis," published in the *American Journal of Gastroenterology,* October, 1957.

D. Emerick Szilagyi, M.D., Richard T. McDonald, M.D., Roger F. Smith, M.D., and **John G. Whitcomb, M.D.,** Detroit, are the authors of an article entitled "Biologic Fate of Human Arterial Homografts," published in A.M.A. *Archives of Surgery,* October, 1957.

Eli M. Brown, M.D., Huntington Woods, is the author of an article entitled "Role of Bronchoscopy in the Prevention of Postoperative Atelectasis," published in the *Journal of the American Medical Association,* October 26, 1957.

John H. Ganschow, M.D., Detroit, is the author of an original article "Conservation Program in Industries," which was published in *Industrial Medicine and Surgery,* September, 1957.

Paul S. Barker, M.D., Ann Arbor, is the author of an article entitled "Myocardial Infarction," presented at the annual Coller-Penberthy Medical Conference, Traverse City, July, 1957, and published in the *University of Michigan Medical Bulletin,* September, 1957.

Lawrence Reynolds, M.D., Detroit, is the author of an article entitled "Blumer's Shelf Tumors," presented at the annual Coller-Penberthy Medical Conference in Traverse City, July, 1957, an abstract of which appears in the *University of Michigan Medical Bulletin,* September, 1957.

George W. Morley, M.D., Ann Arbor, is the author of an article entitled "Erythroblastosis Fetalis—Obstetrical Aspects," presented at the annual Coller-Penberthy Medical Conference, Traverse City, July, 1957, and published in the *University of Michigan Medical Bulletin,* September, 1957.

Ruth M. Heyn, M.D., and **Harry A. Towsley, M.D.,** Ann Arbor, are the authors of an article entitled "Pediatric Management of the Erythroblastotic Infant," published in the *University of Michigan Medical Bulletin,* September, 1957.

Clifford D. Benson, M.D., Detroit, is the author of an article entitled "Surgical Emergencies in the Newborn," published in the *University of Michigan Medical Bulletin,* September, 1957.

M. S. DeWeese, M.D., and **Wm. J. Fry, M.D.,** Ann Arbor, are the authors of an article entitled "Experiences with Abdominal Aortic Resection: A Preliminary Report," published in the *University of Michigan Medical Bulletin,* September, 1957.

John M. Sheldon, M.D., and **Roy Patterson, M.D.,** Ann Arbor, are the authors of an article entitled "Surgical Risk in the Allergic Patient," published in the *University of Michigan Medical Bulletin,* September, 1957.

E. C. Vonder Heide, M.D., Detroit, is the author of an article entitled "Laboratory and Clinical Approach to Bleeding Problems," published in the *University of Michigan Medical Bulletin,* September, 1957.

M. H. Stevens, M.D., Ann Arbor, is the author of an article entitled "The Tranquilizers," published in the *University of Michigan Medical Bulletin,* September, 1957.

Herman H. Riecker, M.D., and **Khurshid A. Mian, B.V.Sc., M.P.H.,** are the authors of an article entitled "The Management of Resistant Infections as Aided by a New Method for Rapid Sensitivity Determinations," published in the *University of Michigan Medical Bulletin,* September, 1957.

Harry M. Nelson, M.D., Detroit, is the author of an original article, "Exfoliative Cytology in the Detection of Uterine Cancer," which appeared in the *Bulletin of the American College of Surgeons,* November-December, 1957, number.

William S. Reveno, M.D., and **Herbert Rosenbaum, M.D.,** Detroit, are co-authors of an original article entitled "Chronic Treatment of Toxic Diffuse Goiter" which appeared in the *AMA Archives of Internal Medicine,* October, 1957.

* * *

Chronic Diseases.—Surgeon-General Leroy E. Burney, speaking to a capacity crowd of students in the Public Health Auditorium, University of Michigan, on October 21, 1957, said preventive medical activities must be increased, if the nation is to avoid an avalanche of chronic diseases in the future. He cited glaucoma and cervical cancer as examples of diseases where known

(Continued on Page 1612)

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methods of treatment and remedial care are not being widely applied. As our population increases and becomes older, it is doubtful whether we can meet the needs of chronic disease cases simply by building the 800,00 to 850,000 additional hospital beds we now need. He cited the need for research and especially the need for people in public health who can look ahead instead of waiting until its problem is at our doorstep.

* * *

The Utah Blue Cross-Blue Shield began construction, October 16, on a new home office. Sister Hilary, Administrator of Holy Cross Hospital and President of Blue Cross, and Paul A. Clayton, M.D., President of Blue Shield, made the announcement. The two organizations have one director, Louis J. Hersey, formerly of Michigan Medical Service. The two units have more than 155,000 enrolled, and their present building is entirely inadequate. The modern new home shown above will overlook the entire valley from the mouth of Parley's Canyon.

* * *

Flu Vaccine.—Gordon Brown, M.D., Professor of Epidemiology, speaking before the University of Michigan College of Pharmacy and the Michigan Branch of the Michigan Pharmaceutical Association, stated that the antigenic differences between the Asian flu virus and other flu viruses known is what has made it such a widespread infecting agent. He said it is most important in maintaining an effective vaccine, that new types of viruses be recognized as soon as they appear "Because of the degree of variations in virus strains and types. It is imperative that any new strain that is shown to be antigenically different must be recognized and incorporated into the flu vaccine as soon as possible." He added, "The more different a new virus is from its known predecessors, the more chance there is for its rapid spread, both in persons who have had vaccinations against other flu viruses and persons who have been previously infected by a flu virus." He mentioned that polio virus has three strains which are constant, and antibodies will neutralize the type. The same applies to smallpox. The flu virus is different. "It not only shows up periodically as a different type mutated from a previous type but has a vast range of strains in each type which make the job of providing a completely effective vaccine an exacting, almost impossible task. A person with a shot may be immunized against one strain but infected by another."

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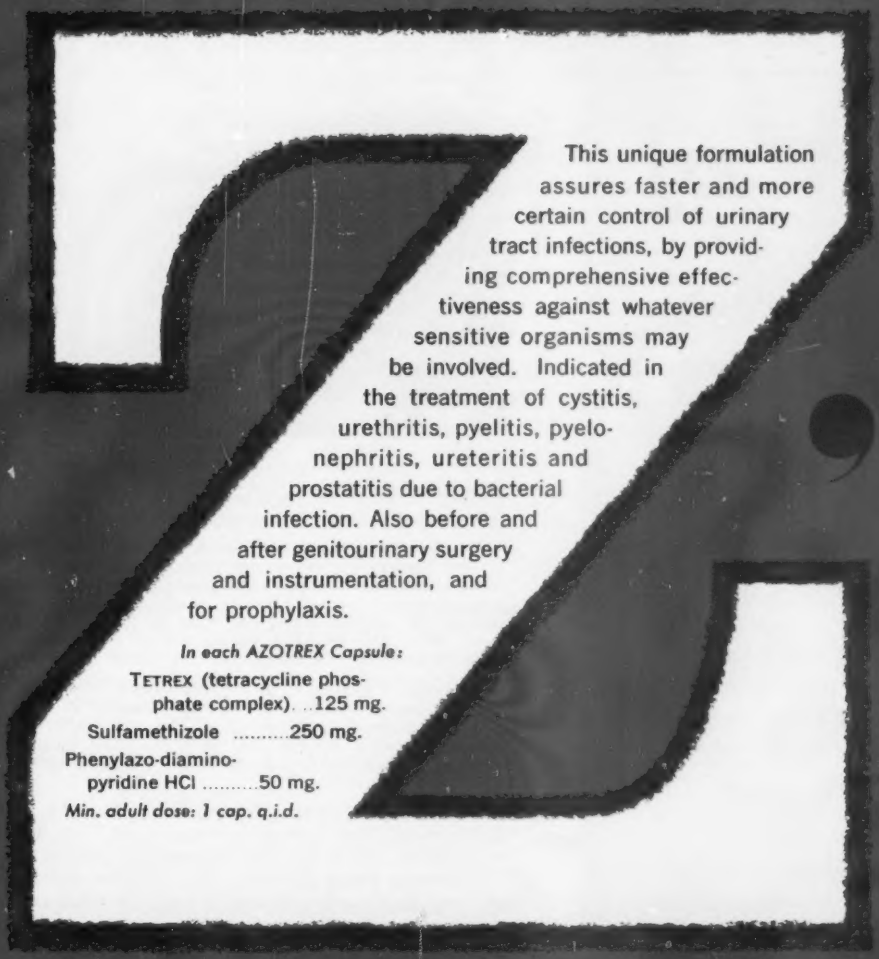

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CAPSULES

(Continued from Page 1612)

Control of the Battle Creek Sanitarium has been assumed by the Hospital Service Foundation, a newly organized group of physicians interested in the continued operation of the historic institution.

Founded more than ninety years ago, the Sanitarium is best known for pioneering principles of nutrition, physical medicine, surgery, and psychosomatic medicine now generally accepted. It is credited for changing the diet of the civilized world, for from its famous dining room came the breakfast cereals which made Battle Creek the cereal food capital of the world.

Replying to queries as to the institution's future, Dr. Dunbar Smith, incoming administrator, stated, "In addition to therapeutic principles for which the Sanitarium has been known through the years, the most modern medical, surgical and psychiatric service will be offered."

Immunization.—Ernest Watson, M.D., Professor of Pediatrics and Communicable Diseases at the University of Michigan, told the Michigan pharmacists, October 23, with old-time killing diseases such as smallpox, diphtheria, whooping cough and scarlet fever are being controlled today for the most part by the immunization programs which have been built up over the past year. He warned, however, "they will again become of epidemic proportions and cause many fatalities if routine immunization should ever lapse." He said that 100 years ago, 33 out of every 100 children born did not survive through their fifth year. Today this number is 25 out of 1000 born. In 1857, the primary cause of death from birth to five years of age was pneumonia. Today the primary cause is accidents and not disease. Today's children are larger and healthier by far than children have ever been in the history of the world. He attributed this to two factors: improved nutrition and control of infection.

* * *

Based upon Public Health reports of the week ending October 5, 1957, an estimated 8,500,000 men, women and children were in bed for one or more days with upper respiratory illness. This figure is based upon reply from questionnaires used in the National Health Survey sampling throughout the country during the week of October 12. The United States Public Health Service, the last week in October, released 7,035,560 cc. of Asian flu vaccine, which brings a total to date of 34,194,047.

Ultrasonic sound can be used to destroy cancer, chart the structure of living cells, and play a part of the treatment of mental disorders, a scientific meeting at The University of Michigan was told Friday, October 25, 1957.

William J. Fry, M.D., of the University of Illinois' Bioacoustics laboratory told the 54th meeting of the Acoustical Society of America that Russian scientists claim they can selectively destroy cancer tissue with beams of high frequency sound.

Tumors so treated could not be transplanted to an experimental animal, Dr. Fry said, "This implies that a type of immunity to cancer has been produced. They also report that the highly malignant tumor melanoblastomo has been treated in humans with encouraging results."

Dr. Fry also described an "ultrasonic microscope" which has been developed at his university. It directs beams of sound through tissue samples while probes on the other side measure the amount that gets through.

In this way, it is possible to chart the distribution of protein in cells, a feat which cannot be duplicated by optical microscopes.

Turning to neurology, he said "three dimensional mapping of brain function of a type and power heretofore completely unattainable will be possible by sweeping focussed beams of ultrasound through the tissue and observing the resultant changes."

"Human neurosurgery by ultrasound is just beginning. Then, too, ultrasound may be useful in eliciting responses, for diagnostic purposes, in patients suffering from various mental disorders."

A total of 107 papers were presented during the meeting, which ended October 26. About 400 acoustics experts attended.

* * *

M. K. Newman, M.D., Detroit, was elected to the Board of Governors of the American Academy of Physical Medicine and Rehabilitation for a period of three years, at the meeting held in the Statler Hotel, Los Angeles, California, September 9, 1957.

* * *

Herbert Bartlett Honored.—On September 28, 1957, the Michigan Tuberculosis Association awarded the Certificate of Recognition and Appreciation to Herbert Bartlett, M.D., of Muskegon, because of meritorious service in the voluntary fight against tuberculosis. The certificate was awarded posthumously and received by Mrs. Lucy Bartlett on the occasion of the 50th anniversary annual meeting. Dr. Bartlett came to Muskegon as Medical Director of the County Tuberculosis Sanatorium in 1926. He had had experience in Pontiac and in the Illinois Sanatorium. He worked very industriously in Muskegon, helped organize tuberculosis case-finding clinics, in Muskegon, Grand Haven and Holland. He had been actively interested in the Michigan Tuberculosis Association, the Mississippi Valley Conference and the Michigan Trudeau Society. He was also Past President of the Muskegon County Medical Society.

* * *

Wayne State University College of Medicine on October 16, 1957, announced gifts totalling more than $116,000. The largest single gift was $46,303 from

the American Cancer Society to continue research under the direction of Arthur J. Vorwald, M.D. From the estate of William A. Spitzley, M.D., came a grant of $18,905.69. The U. S. Public Health Service, National Institutes of Health, gave $11,500 to continue research under the direction of Ernest Gardner, M.D.

The Bureau of State Services, U. S. Public Health Service, granted $12,247 to continue traineeship in public health nursing. The W. B. Saunders Company gave $6,000 to be added to a fund to defray expenses of illustrating a textbook of human anatomy under the direction of Drs. Ronan O'Rahilly and Ernest Gardner. There were numerous small grants.

* * *

Dr. Gordon H. Scott, Dean of Wayne State University College of Medicine, was chosen President-Elect by the Association of American Medical Colleges meeting in Atlantic City on October 23, 1957.

* * *

The Public Health Service and the National Tuberculosis Association have issued reports on the results of the only nationwide survey in five years on tuberculosis. Active tuberculosis has declined 30 per cent, but the gereral control picture is not entirely reassuring. There are still 250,000 cases among persons known to have tuberculosis in an active form. The check shows that despite intensive effort for control, almost 40 per cent of the active cases are unknown to health authorities, and these people are not receiving treatment. This unknown list is estimated on the basis of x-ray survey findings. The most encouraging phase of the report is that active cases have dropped from 350,000 to 250,000, and inactive cases requiring supervision of health departments from 600,000 to 550,000.

* * *

Samuel T. Gibson, M.D., national director of the Red Cross Blood Program, reports that in the fiscal year 1956-57, 390,000 used the Red Cross Blood and this for the first time in the nine years' program, reached every state in the union. 2,047,000 pints were taken from voluntary donors for civilian use, all but 285,000 of which was used by hospitals for whole blood transfusion.

* * *

Asian Flue Vaccine.—Surgeon-General Burney of the Public Health Service, has announced that it is now possible to double the potency of the Asian influenza vaccine, and the more potent doses will increase not only the degree of immunity but the rapidity by which immunity is achieved. The Surgeon General has directed that the new 400 CCA units be produced immediately —as soon as feasible.

* * *

The first National Conference on Nursing Homes for the Aged will be held in Washington, February 25 to 28, 1958. It is estimated that 300,000 men and women are now being sheltered and cared for in about 25,000 nursing homes, and expenditures for this purpose are approximately $550,000,000 annually. The Government is interested and hopes medical societies and private agencies may be interested in raising the quality of services which these homes provide. Surgeon-General Leroy E. Burney raised this question at the American Nursing Home Association meeting in Atlantic City

early in October. This ties in with a discussion at the subcommittee meeting of the A.M.A. Council on Medical Service in Chicago, October 20 and 21, and the recommendation of a liaison committee to carry through and keep posted on the nursing home situation.

* * *

Contributory Insurance.—It has been proposed that the State of New York enter into a contributory insurance program covering about 70,000 of its employes and about 7,000 additional in the retired status plus dependents. This is reported to be the most liberal and comprehensive program enacted by a governmental body to provide its employes with protection against medical care costs. State employes electing to participate will have the choice of Blue Cross-Blue Shield; group care plans, and other plans. The share of costs will depend upon the type of coverage selected and whether the dependents are included. Hospitalization, surgical and in-hospital medical benefits are provided. Major medical expense is included and home and office care will be received by employes choosing group practice benefits.

* * *

Farm-City Week.—The American Medical Association has urged state and county medical societies to join in the farm-city week, November 22 to 28, 1957, conducted by the Kiwanis clubs throughout the nation. The AMA Council on Rural Health has recommended a list of topics to be of interest to the farm people. Since the purpose of the week is to lead to the understanding of each other's neighbors, city dwellers would benefit equally from their discussion. Suggested discussion topics: nutrition, medical costs and voluntary insurance, environmental and rural sanitation, school health, safety programs, rural distribution of physicians, preventive medicine, mental health, careers in medicine, insecticide and pesticide poisoning.

* * *

Veterans Administration Statistics.—The following information was taken from the VA records, as of July 5, 1957:

Veterans in civil life	22,641,000
Korean veterans	5,122,000
World War I and II veterans	17,389,000
Increase in past year	236,000
Average patient load in VA hospitals	109,579
In non-VA hospitals	2,920
Decrease during year	66
Eligible hospitalization applicants awaiting admission	22,188
Medical out-patients during June, 1957	161,110
Decrease from June, 1956	10,359

Harvey V. Higley, Veterans Administration Administrator reported that one-third of their patients are service-connected and two-thirds are non-service-connected.

* * *

Wayne State University's Board of Governors, at the October meeting, authorized the University to seek funds from the legislature to increase the size of the medical school from seventy-five entering students to 125. They asked for a supplementary budget of $285,650 for aditional faculty, equipment and operating

money. This would help in relieving the critical shortage of doctors in Michigan.

* * *

Tax Rule on Fees for Dental Courses.—To resolve any doubt, the internal revenue department has issued a ruling which for tax purposes draws a distinction between admission to lecture halls and admittance to movie houses and race tracks. Advise had been sought as to whether federal tax on admission was applicable to fees charged to a series of lectures in dental practice administration and dental office management. Such charges it was held are in the nature of tuition fees for educational instruction and not amounts paid for admission, hence not subject to tax on admission.—WRMS, October 21, 1957.

* * *

The United States Supreme Court, in October, denied review of several cases involving medical questions. A physician sought to compel the California Board of Medical Examiners to overturn his year's suspension from practice following conviction of income tax evasion on a plea of nolo contendere. Another case against a Manhattan Life Insurance Company in which the insured denied liability except for return of premiums on the ground that a policy holder made fraudulent representations of physical condition. He died and his widow tried to collect. The Supreme Court refused to hear the case.—WRMS, October 21, 1957.

* * *

National Medical Foundation for Eye Care.—Due to the public confusion in the field of medical eye care and the difference in the training and functions of ophthalmologists, opticians and optometrists, the ophthalmologists with the sanction of the Section on Ophthalmology of the American Medical Association have formed a National Foundation within the year to create a better public understanding of the professional and scientific standards of good eye care and the qualifications and functions of ophthalmologists and all the related technical personnel who assist them in providing eye care to the public. The foundation has recently published a very worthwhile pamphlet, "What Is an Ophthalmologist?" and a report, "Medicine, Optometry and the Public Welfare." Nearly 200,000 copies of the pamphlet have been ordered. This program has the official endorsement and contains among others, the names of Harold F. Falls, M.D., Ann Arbor; A. D. Ruedemann, M.D., Detroit, and Derrick Vail, M.D., Chicago. The pamphlet may be secured by request to the Executive offices, 250 W. 57th Street, New York 19, New York.

* * *

The American Academy of Physical Medicine and Rehabilitation announces the election of new officers, including James W. Rae, Jr., M.D., of Ann Arbor, as Treasurer. George D Wilson, M.D., Asheville, N. C., is the new President; Louis B. Newman, M.D., Chicago, President-elect; Clarence W. Dail, M.D., San Gabriel, California, Vice President; and Harriet E. Gillette, M.D., Atlanta, Georgia, Secretary.

* * *

Judge Clears Medical Suit.—On January 17, 1955, Dr. Wm. A. Kopprasch, of Allegan, entered suit against

(Continued on Page 1622)

(Continued from Page 1620)

several groups alleging conspiracy to prevent his practicing medicine in Allegan Health Center and extensive damages amounting to $705,000.00. He named the Michigan State Medical Society, the Michigan Hospital Association, the Allegan County Medical Society, the Allegan Health Center, and the members of these various groups. The case has been in the courts with numerous hearings and on October 10, Judge Raymond L. Smith dismissed the Michigan State Medical Society, the Michigan Hospital Association and the Allegan County Medical Society, as defendants. He also granted a motion by the defense attorneys to strike from the records the allegations of conspiracy. He will hear briefs and consider the balance of the case. Part of this action was an attempt by the doctor to force his membership on the staff of the Allegan Health Center, and force the Hospital to allow him to practice in it, alleging conspiracy damages of $250,000 and losses of $35,000 cash each year from 1943 to 1955.

* * *

Priceless Medical Books Lost.—The news bulletin of the National Library of Medicine for October, 1957, reports that on September 17 at the end of an eighteen-hour period during which more than two inches of rain fell on the Washington area, a tragedy of considerable proportions occurred at the National Library of Medicine. When the Library opened that morning, it was discovered that water was pouring out of the west basement stacks. Investigation disclosed that the torrent was a waste line running over stack-ranges containing 1808 to 1850 books in the C and D portions of the alphabet. All the available members of the circulation staff immediately pitched in to rescue what books they could. Some 400 volumes had been damaged. These were removed along with another 400 books from the vicinity. The final outcome is that about twenty-five volumes are so badly damaged as to be probably beyond all salvage. These included several volumes of Sir Astley Cooper's works, Abraham Colles' "Treatise On Surgical Anatomy—1811," Cloquet's Anatomy, Comet's Surgical Dictionary of 1829, and a hand-painted, illustrated edition of a pocket anatomy by Cooke. This points up the immediate demand for better housing of these priceless books.

* * *

The Medicare program, as of October 1, 1957, has been in operation for ten months and there are on record as participating in the Medicare program, 4,522 doctors of medicine, 625 doctors of osteopathy, and one doctor of dental surgery.

* * *

Blue Shield Membership.—As of June 30, 1957, Blue Shield membership in the United States, Porto Rico and Hawaii is 38,437,226 or 22.87 per cent of the population. Blue Shield members in Canada are 1,791,985 or 11.22 per cent of the population. This makes a total Blue Shield membership, 40,229,211. There are five states with more than 40 per cent of the population enrolled as Blue Shield members: Dela-

(Continued on Page 1624)

(Continued from Page 1622)

ware, 62.52 per cent; District of Columbia, 55.24 per cent; Michigan, 48.15 per cent; Connecticut, 46.17 per cent, and Massachusetts, 42.75 per cent. Following closely are New York with 39.24 per cent; New Hampshire-Vermont, 38.93 per cent; Pennsylvania, 35.72 per cent; Indiana, 31.7 per cent; Colorado, 30.71 per cent; New Jersey, 30.4 per cent. In Canada, only one province, Manitoba, has over 30 per cent—that is 32.17 per cent. It is interesting to know that in the year 1956, the last full-year plans in the United States, Porto Rico and Hawaii paid to doctors, $407,350,023.00, and in Canada, $31,237,425.00, making a grand total of $438,587,448.00. The first six months of 1957, that total figure was $256,371,895.00. The Michigan Medical Service balance sheets for August 31, 1957, showed total payments to doctors for all services—medical-surgical plan, veterans plan and medicare—of $253,369,359.53. Michigan Medical Service had passed the quarter of a billion dollar mark.

* * *

Service Audit Card.—During the month of August, Michigan Medical Service mailed out 50,213 service audit cards to subscribers for whom medical service bills had been paid. Of these, 13,483 were returned; 744 made unsatisfactory comment regarding Blue Shield, and 102 regarding Blue Cross. The most common complaint was that surgical benefits were not adequate (202), doctors charged in addition to Blue Shield (81), follow-up office care should be paid (56), first aid benefits not adequate (35), x-ray benefits of basic contract not adequate (34), maternity benefits not adequate (33). If one considers the number who had a chance to complain (over 50,000) and the very meager number who did complain, the percentage is pretty good. However, it should be the ambition of the whole membership to see to it that there are no causes of complaint.

* * *

S. S. Keshishian, M.D., Honored.—More than 550 devoted patients, friends and colleagues of Dr. Keshishian gathered on September 22, 1957, at the Latin Quarter, Highland Park, for a testimonial dinner honoring this family doctor who for forty years has served this community faithfully. Many praises and tributes were given.

Among those present at the speakers' table were: James M. Robb, M.D., representing the medical profession; Hon. Paul Winkler, Mayor of Highland Park; Hon. Thomas C. Murphy, Wayne County Probate Judge; Hon. Joseph G. Rashid, Wayne County Circuit Judge; Kelley Keith, M.D., from Highland Park General Hospital. Several other prominent speakers from the other states and Canada were present.

* * *

Warning Against Allergic Reaction.—The American Foundation for Allergic Diseases in New York on October 4, cautioned physicians and their patients that allergic reactions may occur occasionally among those who are given the newly developed vaccine against Asian influenza, unless precautions are taken against

such reactions. Only a few thousands out of the millions who are receiving the vaccine are allergic, but those sensitive to egg protein should take precautions. The reactions will be merely annoying to some, but some patients have had extreme sensitivity to egg protein which is found in some vaccine.

* * *

With today's improved methods of treatment Michigan hospital facilities for tuberculosis patients are serving more TB patients than formerly. One of the reasons for this is that the necessary period of hospitalization has been shortened.

At Michigan State Sanatorium, for example, the average period of hospitalization in 1946 was 351 days. Last year the average stay was 200 days. In 1946, there were 695 patients treated in the sanatorium. This increased to 837 patients in 1956. At the same time, the volume of outpatient services of Michigan State Sanatorium increased markedly.

* * *

Public Opinion Survey.—The *Blue Shield Medical Care Plans Newsletter* for October, 1957, devotes two pages to our Public Opinion Survey. We are quoting short selections:

"Conducted under the joint auspices of the Medical Society and Michigan Health Council, the survey represents one of the most comprehensive studies of its kind ever undertaken. In scope and detail, the Michigan Survey can easily be passed as monumental. That the doctors of the State ventured on such a research project is without question a milestone in leadership and will most certainly set an example which will undoubtedly be quickly emulated elsewhere.

"The study is . . . a clear cut demonstration of the medical profession's determination to assume leadership in shaping the course of medical care prepayment on the basis of what the public thinks. This is precisely the kind of active physician concern with the public viewpoint that is inescapable if the progress of voluntary medical care prepayment under medical leadership is to continue in serving the interest of both medicine and the public."

* * *

A Symposium on Fundamental Cancer Research (twelfth annual) will be held at the University of Texas Tumor Institute, Houston, Texas, March 6-7-8, 1958. For program and information, write Titus C. Evans, M.D., at the Tumor Institute, Texas Medical Center, Houston 25.

* * *

The fifth International Congress of Diseases of the Chest, sponsored by the American College of Chest Phy-

sicians, will be held in Tokyo, Japan, September 7-11, 1958. For program, write the College at 112 East Chestnut Street, Chicago 11.

* * *

Wayne State University College of Medicine's newly established department of neurology has recently announced the following staff appointments: John Stirling Meyer, M.D., Department Chairman; Russell T. Costello, M.D., Clinical Professor; Z. Stephen Bohn, M.D., Clinical Assistant Professor; Jacob C. Chason, M.D., Associate Professor and Pathologist in Chief; Joseph L. Whalen, M.D., Clinical Assistant Professor; Joseph H. Chandler, M.D., Clinical Instructor. Chairman Meyer reports that a neurological teaching service has been established with a total of thirty-three neuromedical beds, fifteen in Detroit's Receiving Hospital and eighteen in Lafayette Clinic, adjacent to the College of Medicine Science building.

* * *

Chicago Ophthalmological Society will hold its annual Clinical Conference at the Drake Hotel, Chicago, February 21-22, 1958. For program, write the Registrar at 1150 North Lorel Avenue, Chicago 51.

* * *

William D. Robinson, M.D., Ann Arbor, has been appointed to the National Advisory Arthritis and Metabolic Disease Council, as announced by USPHS Surgeon General L. E. Burney, M.D.

Congratulations, Doctor Robinson!

* * *

Robert G. Lovell, M.D., has been appointed Assistant Dean of the University of Michigan Medical School, to replace the late Wayne Whittaker, Ph.D., Charles J. Tupper, M.D., has been appointed Secretary of the Medical School.

* * *

"Grand Rounds" of November 13 was a spectacular progress report on Coronary Disease, presented nationally by means of closed circuit television—the sixth in the "Grand Rounds" series of telecasts under the sponsorship of Upjohn Company of Kalamazoo, Michigan. Discussed were three key questions in coronary disease: (1) What is the place and value of surgery? (2) What is the role of dietary fat; (3) Is long-term anticoagulation worthwhile? The Michigan outlets of live ninety-minute closed circuit "Grand Rounds" were Detroit (Rackham Educational Memorial Auditorium) and Kalamazoo (Upjohn Company plant).

* * *

The University of Cincinnati's Institute of Industrial Health offers graduate fellowships in industrial medicine for graduates of approved medical schools who have completed at least one year of internship. The three-year course of instruction leads to the degree of Doctor of Science in Industrial Medicine. Stipends for the first two years vary from $3,000 to $4,000, depending on marital status. In the final or residency year, a Fellow is compensated by the organization in which he is completing his training. For full information, write Secretary, Institute of Industrial Health, College of Medicine, Eden and Bethesda Avenues, Cincinnati 19, Ohio.

International Relations.—The St. Clair County Medical Society in its *Information Bulletin* always invites attention to the meetings and clinic days of the Lambton County Medical Society of Ontario (Sarnia). It also mails the programs of Lambton County Medical Society to the St. Clair Members. Congratulations!

* * *

The finding that 7.2 per cent of the patients in a tuberculosis sanatorium have "serologically proved" histoplasmosis and that the actual presence of the microorganism was demonstrated in 33 per cent of the cases is indeed remarkable. It certainly calls for very serious consideration of the importance of histoplasmosis in tuberculosis sanatoriums.—MICHAEL L. FURCOLOW and CHARLES A. BRASHER, M.D., *American Review* of Tuberculosis, May, 1956.

* * *

The big trouble with the world is that the stupid are cocksure and the intelligent full of doubt.—*Bertrand Russell.*

* * *

He who only plans is a dreamer; he who only works is a drudge; but he who plans and works his plans is a conqueror.—*Life Association News.*

* * *

The wise men of antiquity, when they wished to make the whole world peaceful and happy, first put their own states into proper order. Before putting their states into proper order, they regulated their own families. Before regulating their families, they regulated themselves. Before regulating themselves, they tried to be sincere in their thoughts. And before being sincere in their thoughts, they tried to see things exactly as they really were.—*Confucius.*

* * *

E. R. Jennings, M.D., Detroit, was elected Vice President of the American Association of Blood Banks at its tenth anniversary meeting in Chicago.

Congratulations, Doctor Jennings!

* * *

The twenty-first annual meeting of the New Orleans Graduate Medical Assembly will be held March 3-4-5-6, 1958, Roosevelt Hotel, New Orleans. For program, write Maurice E. St. Martin, M.D., Secretary, Room 103, 1430 Tulane Avenue, New Orleans 12, Louisiana.

* * *

Col. Richard D. Mudd, Saginaw, is serving a special two-week tour of active service visiting United States Air Forces in Europe bases in Germany, France and England.

* * *

Harvey V. Higley has notified the President of his desire to be released from his position as Administrator of Veterans Affairs. Mr. Higley has been VA Administrator since 1953 and now plans to return to his home in Marinette, Wisconsin.

* * *

H. M. Pollard, M.D., Ann Arbor, Secretary-General of the World Congress of Gastroenterology, announces the Congress will hold its 1958 meeting in Washington, D. C., at the Sheraton-Park Hotel, May 25-31.

The fifty-third annual meeting of the American Trudeau Society is scheduled for May 19-21 in Philadelphia, Pennsylvania. For program, write Ellen Lovell, Director, Public Relations, National Tuberculosis Association, 1790 Broadway, N. Y. C. 19.

* * *

Copies of "Be Safe at Home" are now available at new low prices from Miss Ernestine B. Davidson, Detroit Society for the Prevention of Blindness, Inc., 1401 Ash Street, Detroit 8, Michigan. Single copy—35 cents; 2 to 49 copies—25 cents each; 50 to 99 copies—20 cents each; and over 100 copies—15 cents each.

* * *

Creation of a new Department of Industrial Health and the abolition of the Department of Tropical Diseases in the University of Michigan School of Public Health was approved by the Regents at their November meeting. Personnel now in the Department of Tropical Diseases will be transferred to the Department of Epidemiology, headed by Thomas Francis, Jr., M.D.

* * *

The Board of Missions of the Methodist Church has announced a need for twenty doctors in its mission fields in ten countries overseas in 1958. The openings cover a varied range of medical fields, including internal medicine, surgery, general practice, public health, gynecology, pathology and radiology. For complete information, write the Board through its Office of Missionary Personnel, 150 Fifth Avenue, New York 11, N. Y.

* * *

Postgraduate course on diseases of the chest is being offered by the Council on Postgraduate Medical Education of the American College of Chest Physicians, Warwick Hotel, Philadelphia, March 3-7, 1958. The tuition fee is $75 including round table luncheons. For information, write to the Executive Director, American College of Chest Physicians, 112 East Chestnut Street, Chicago 11, Illinois.

* * *

Morton Hack, of Detroit, has been elected President of the Hack Shoe Company, succeeding his father, Nathan Hack, who becomes Chairman of the Board of the firm. Leonard Hack becomes Vice President-Treasurer.

Congratulations and best wishes, Morton Hack!

Grover C. Penberthy, M.D., Detroit, has been made a member of the Detroit City Plan Commission by Mayor Miriani.

Congratulations, Doctor Penberthy!

* * *

A 60 per cent cut in administrative costs during the last ten years, totaling more than a quarter of a billion dollars, has been reported by Veterans Administration. VA ascribed the reduction to several factors, including reduced work-loads, expiration of programs, mechanization of administrative operations, greater experience and productivity of employees, and lower Congressional appropriations.

* * *

The ninth Selby Discussional was held at the University of Michigan, Ann Arbor, December 6-7. Formerly called the Ann Arbor Discussional, the conference is now named after C. D. Selby, M.D., retired medical director of the General Motors Corporation. Speakers were: Carl E. Badgely, M.D., James W. Rae, M.D., and Gerritt Schepers, M.D., all of Ann Arbor.

* * *

The increasing importance of written medical communications is being stressed at the 1958 "Schering Award" competition recently opened to medical students in the United States and Canada. The "Schering Award" was originated by the Schering Corporation in 1940. A total of $5,700 in cash prizes, plus many honorable mention prizes will be awarded for entries. The three subjects selected are: "The Mechanism and Current Concepts of Treatment of Nausea and Vomiting," "Current Trends in Corticosteroid Therapy in Pediatrics," and "The Use of Tranquilizer Therapy in Office Practice."

Entry blanks and contest rules are available in all medical schools.

MEDICAL TELEVISION SHOWS
Produced by
Michigan Health Council

WJBK-TV, Detroit

October 6—"Asian Flu" (Film—"The Silent Invader")
October 13—"Preface to a Life" (Film)
October 20—"Kid Brother" (Film)
October 27—"Cancer" (Films—"From One Cell" and "Man Alive")

M.D. LOCATIONS

Through November 1, 1957

Placed by Michigan Health Council

A. J. May, M.D., Benton Harbor

Assisted by Michigan Health Council

W. R. Kemp, M.D., Dexter

* * *

Community Health Association.—*The Los Angeles County Medical Society Bulletin* for September 5, 1957, contained the second of two two-page spreads concerning the Community Health Association, giving some details of its structure and operation. The editor makes this introduction:

"In this issue, we present a synopsis of the Community Health Association initiated in Detroit under the aegis of the United Auto Workers. This plan, which its sponsors say is competitive with Blue Cross-Blue Shield and private carriers, is designed specifically for a great industrial city and is very likely to be the forerunner of a comprehensive medical insurance plan for Los Angeles."

The listing of the Board of Directors is very intriguing. It starts with Edgar F. Kaiser, President Kaiser Industries; James A. Lewis, Vice President, University of Michigan; Circuit Judge Wade H. McCree, Jr.; Walter P. Reuther; Joseph Verhelle, banker; Rabbi Morris Adler; Rev. Fr. John A. Trese, hospital coordinator of the Catholic Archdiocese; and the Rev. Elmer B. Usher, Director of the Department of Christian Social Relations of the Episcopal Diocese of Michigan. In various parts, it is specified that complete services will be given and there will be no extra charge. The subscriber will know absolutely what his medical costs are going to be.

"To assure the promotion and maintenance of a high quality of medical and hospital care, there must be: (a) standards of qualifications for physicians in groups which serve CHA members; (b) standards for hospital and medical group facilities and equipment; (c) standards for medical practice to be set with competent medical advice and *enforced* by the medical director and staff; (d) provision for continuing education of professional personnel; (e) periodic evaluation of quality.

"Every member of the association should have the opportunity and should be encouraged to select a personal physician *from among CHA participating doctors.*

"There shall be no lay interference by the pre-payment plan in purely medical matters." (Section C and E above are an answer to that. There is a medical director who will direct the medical program.)

"Non-medical matters are a valid concern of consumers. A health plan in recognition of its responsibilities to the public interest should give the plan subscribers an adequate voice in non-medical affairs."

EDITOR'S NOTE.—The above news item is quoted with some notations or emphasis from the *Bulletin of the Los Angeles County Medical Society,* pointing out an evident extension of the Community Health Association program which could be just as serious as a federally sponsored one and *could* lead to a federal plan.

THE DOCTOR'S LIBRARY

Acknowledgments of all books received will be made in this column, and this will be deemed by us as full compensation to those sending them. A selection will be made for review, as expedient.

BOOKS RECEIVED

MEDICINE, OPTOMETRY AND THE PUBLIC WELFARE. A Report to the Medical Profession. Issued by The National Medical Foundation for Eye Care.

EXPECTANT MOTHERHOOD. By Nicholson J. Eastman, M.D., Professor of Obstetrics in Johns Hopkins University; Obstetrician-in-Chief to the Johns Hopkins Hospital. Third edition, revised. Boston: Little, Brown and Company, 1957. Price $1.75.

THE PHILOSOPHY OF MEDICINE. By William R. Laird, M.D., Medical Foundation, Inc. Charleston, West Virginia, 1956.

THE PATIENT SPEAKS. Mother Story Vermatim in Psychoanalysis of Allergic Illness. By Harold A. Abramson, M.D., Associate Attending Physician and Chief of the Allergy Clinic, the Mount Sinai Hospital, New York City; Research Psychiatrist, Biological Laboratory, Cold Spring Harbor; Consultant, Huntington Hospital; Assistant Clinical Professor of Physiology, Columbia University; Consultant (Psychology) Department of the Army. New York: Vantage Press, 1956. Price $3.50.

CARE OF THE LONG TERM PATIENT. Chronic Illness in the United States. Volume II. Commission on Chronic Illness. Published for the Commonwealth Fund. Cambridge, Massachusetts: Harvard University Press, 1956. Price $8.50.

OCCUPATIONAL HEALTH NURSING. By Mary Louise Brown, R.N., M.A., Assistant Professor of Public Health, Yale University School of Medicine, in association with John Woster Meigs, M.D., Associate Professor of Public Health, Yale University School of Medicine. New York: Springer Publishing Company, Inc., 1956. Price $4.50.

MEDICINE IN CHICAGO, 1850-1950. A Chapter in the Social and Scientific Development of a City. By Thomas Neville Bonner. Madison, Wisconsin: The American History Research Center, 1957. Price $5.00.

GUIDE TO MEDICAL WRITING. A Practical Manual for Physicians, Dentists, Nurses, Pharmacists. By Henry A. Davidson, M.D., Editor, *Journal of the Medical Society of New Jersey*. New York: The Ronald Press Company, 1957. Price $5.00.

THE FIGHT FOR FLUORIDATION. By Donald R. McNeil. New York: Oxford University Press. Price $5.00.

THE HAPPY LIFE OF A DOCTOR. By Roger I. Lee, M.D. Illus. Boston: Little, Brown and Company, 1957. Price $4.00.

CIBA FOUNDATION SYMPOSIUM ON PAPER ELECTROPHORESIS. Editors for the Ciba Foundation, G. E. W. Wolstenholme, O.B.E., M.A., M.B., B.Ch., and Elaine C. P. Millar, A.H.-W.C., A.R.I.C. 74 illustrations. Boston: Little, Brown and Company, 1957. Price $6.75.

CLINICAL EXAMINATIONS IN NEUROLOGY. By Members of the Sections of Neurology Section of Physiology, Mayo Clinic and Mayo Foundation for Medical Education and Research, Graduate School, University of Minnesota, Rochester, Minnesota. James A. Barston, M.D.; Reginald G. Bickford, M.D.; Joe R. Brown, M.D.; Edward C. Clark, M.D.; Kendall B. Corbin, M.D.; David D. Daly, M.D.; Lee M. Eaton, M.D.; Norman P. Goldstein, M.D.; Edward H. Lambert, M.D.; Clark H. Millikan, M.D.; Donald W. Mulder, M.D.; Harry L. Parker, M.D.; E. Douglas Rooke, M.D.; Joseph G. Rushton, M.D.; Robert G. Siekert, M.D.; Jack P. Whisnant, M.D. Philadelphia and London: W. B. Saunders Company, 1956.

MAY'S MANUAL OF THE DISEASES OF THE EYE. For Students and General Practitioners. Twenty-second edition. Revised and edited by Charles A. Perera, M.D., Associate Clinical Professor, College of Physicians and Surgeons, Columbia University, New York; Attending Ophthalmologist, Presbyterian Hospital, New York; Consultant in Ophthalmology, Vassar Brothers Hospital, Poughkeepsie, New York. 378 illustrations, including 32 plates with 93 colored figures. Baltimore: The William and Wilkins Company, 1957. Price $6.00.

This very popular manual is a condensed but explicitly told review of the whole field of ophthalmology, as have been its many predecessors. The size has not been changed, but much of the text has been changed and some illustrations have been added. It is really fascinating reading. Its popularity is attested to by the fact that this is the twenty-second edition and that most of the previous editions were reprinted once or twice. There have also been eleven British editions, most of them reprinted; twelve Spanish editions, six French editions, seven Italian editions, two Dutch editions, two German editions, two Japanese editions, four

Chinese editions, three Portuguese editions, and one Urdu (Indian) edition. We are just as pleased with this book as we have been with many of the previous editions and know others will be equally pleased.

IT PAYS TO BE HEALTHY. A World-Renowned Physician Guides You to Success, Happiness, and Health in Your Work. By Robert Collier Page, M.D., F.A.C.P. Englewood Cliffs, N. Y.: Prentice-Hall, Inc., 1957. Price $4.95.

Doctor Page has spent many years in directing the medical care of people in industry. He starts out in the very first paragraph by saying that anyone who is earning a living for himself and his family finds it a challenge to keep pace with the standard of living that always seems to be two jumps ahead. This holds true, whether he is in the $3,000, $5,000, $10,000 or $50,000 a year bracket. In other words, he is always under pressure.

The book is well written in a conversational style drawing from the doctor's experience and telling the reader what to do to preserve good health, how to arrange his work, how to avoid tension and ulcers. To illustrate points, the author quotes histories of patients he has had who have solved problems. The whole theory of his work, is that if a person is to be a success he must be in good health, and he can be in good health if he follows certain definite rules and regulations which are not specified distinctly, but are hinted at.

The author winds up with a suggestion for the retirement age. He has followed his patient all the way from birth through the seven areas of living according to Shakespeare, and makes suggestions of how to prepare for the years after he has stopped his regular outline of work. When you finish the book you feel as though you had had a long visit with Doctor Page, with a sense of being much rewarded.

FROM STERILITY TO FERTILITY. A Guide to the Causes and Cure of Childlessness. By Elliot E. Philipp, M.A., M.B., B.Chir., F.R.C.S., M.R.C.O.G. New York: Philosophical Library Publishers (15 East 40th Street), 1957. Price $4.75.

This book is primarily for the lay public but is useful to the physician and nurse as a means of simple education to the problems of infertility. It is a guide for newly married couples and those who have wanted children but who have not been able to produce any. Through its diagrams, charts and actual case reports, it points the way for the lay person to obtain the help they need. It further points out the pitfalls individuals can avoid, and finally explains the problems of adoption and the correct way of going about adopting a child. The book has an excellent bibliography for all interested in this and allied subjects.

J.R.P.

STEDMAN'S MEDICAL DICTIONARY. Words used in medicine with their derivations and pronunciation including dental, veterinary, chemical, botanical, and other special terms; anatomical tables of titles in general use, the terms sanctioned by the Basle Anatomical Convention; the New British Anatomical Nomenclature Congress of Anatomists; Pharmaceutical

preparations official in the U. S. and British Pharmacopoeias or contained in the National Formulary; biographical sketches of figures in the history of medicine. Nineteenth revised edition, with Etymologic and Orthographic Rules. Edited by Norman Burke Taylor, V.D., M.D., F.R.S.C., F.R.C.S. (Edin.) F.R.C.P. (Can.) M.R.C.S. (Lon.), University of Western Ontario, formerly of the University of Toronto. In collaboration with Lieut. Col. Allen Ellsworth Taylor, D.S.O., M.A., Classical Editor. Baltimore: The Williams and Wilkins Company, 1957.

This volume is practically an unabridged medical dictionary. Words used in medicine are constantly being added, and this book has gone through and reached its nineteenth edition with abc 1656 pages. It is very well printed, two columns, with thumb indexes for every second letter. To a person who hopes to keep anywhere near up to date in medicine, this dictionary is a necessity. The words are all set out in black face type, easy to distinguish from the regular text.

Communications

Dear Doctor Haughey:

Relative to the termination of the TPI diagnostiv service at the Hospital in Ann Arbor, we have attempted to notify prysicians and institutions in the state that the tests are no longer performed here but our coverage is very incomplete. Physicians continue to send patients or specimens to us and we have to turn them down. Since this is an unnecessary waste of time and money for everyone involved, we would be most grateful if you could find the space to include this brief comment in THE JOURNAL of the Michigan State Medical Society at the earliest opportunity.

My sincere thanks for whatever immediate help you can give us in disseminating this information throughout the state.

Sincerely yours,
A. H. WHEELER, DR. P .H.
Assistant Professor of Bacteriology
University of Michigan

Ann Arbor, Michigan
November 8, 1957

* * *

Dear Doctor Haughey:

The Illinois Committee on Maternal Welfare announces the Second Illinois Congress on Maternal and Infant Care to be held at the Hotel Pere Marquette, Peoria, February 4 through 6, 1958. "Illinois Moves Forward in Maternal and Infant Care" has been chosen as the theme for this unique two-and-one-half day meeting. Topics will revolve around the inter-professional approach to maternal and infant care, and all interested health professions are being invited to participate in the program.

The Second state Congress will offer a comprehensive program of panel discussions, breakfast and luncheon conferences, and round tables to enable the maximum number of persons to participate in small group discussions. A highlight of the Congress will be the Banquet February 5, featuring an address by The Honorable Otto Kerner, Judge, County Court of Cook County, Chicago.

We hope you will help us to reach physicians who may be interested in attending the Second Congress by an announcement in your Journal, especially all persons concerned with the care of mothers and babies in order that they may have the opportunity to participate in this "team-approach" to their problems.

Sincerely yours,
DEANE M. FARLEY, M.D.
General Chairman
2nd Illinois Congress

Chicago, Illinois
November 9, 1957

Index to Advertisers

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